

Relationship between Demographic Variables and Generalized Anxiety Disorder among
Single Mothers in Pentecostal Churches in Kibera Informal Settlement, Nairobi County,
Kenya

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DECLARATION

I, the undersigned, declare that this research is my original work developed through reading, research and reflection and to my knowledge has never been submitted to any other University or institution for higher learning for any academic credit. All sources used in this proposal have been appropriately cited and dully acknowledged.

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DEDICATION

I dedicate this study to my family for their love and support throughout the study.

ACKNOWLEDGEMENT

I thank the Almighty God for His grace throughout my academic pursuits. In the course of writing this project, I benefited from input, critique and support from my supervisors. I owe the success of the research project to my two Supervisors Dr Pius Muasa and Dr Catherine Mwarari, who worked tirelessly but with a lot of patience to provide guidance. I would also like to express passionate gratitude to the Tangaza University for providing an atmosphere that was conducive for learning.

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ABSTRACT

Generalized anxiety disorder (GAD) is a mental disorder that may be induced by people, occasions, or different circumstances in one's life. This study examined the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya. The study addressed three specific objectives which were; to establish the levels of generalized anxiety disorder among single mothers, to examine the relationship between demographic variables and generalized anxiety disorder among single mothers, and to assess the coping strategies for generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya. The study employed the mixed method of research. Generalized Anxiety Disorder-7 (GAD-7) questionnaire was used to gather quantitative data. Interview guide was employed to collect qualitative data. The study employed simple random sampling and purposive sampling techniques. The sample size of the study was 380 single mothers. The Lazarus's (1993) stress theory and resiliency theory informed the study. Quantitative data was analyzed using descriptive and inferential statistics. The Statistical Packages for the Social Sciences (SPSS) version 26 was used to conduct the analysis. After the collection of qualitative data, through an audio recording of participants' contents, transcription was done, and the systematic thematic analysis was carried out. Findings revealed that 39.9% (n = 161) of single mothers scored severe level of generalized anxiety disorder, 34.5% (n = 139) of the single mothers were at moderate generalized anxiety disorder, 24.9% (n = 100) scored mild generalized anxiety disorder, while (0.7%, n = 3) of the single mothers were at low level of generalized anxiety disorder. There was a significant relationship between demographic variables of age, level of education, employment status and generalized anxiety disorder ($p = 0.00 \leq 0.05$) among single mothers. Qualitative findings indicated that counseling, the practice of Christian spirituality, engaging in alcohol use and sharing with others were coping strategies for generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya. The study recommended that the single mothers who were at mild, moderate and severe level of generalized anxiety disorder may be helped in counseling so as to possibly identify the underlying issues that could be responsible for moderate and severe levels of generalized anxiety disorder.

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ABBREVIATIONS AND ACRONYMS

ADHD	Attention Deficit Hyperactivity Disorder
AIDS	Acquired Immunodeficiency Syndrome
DSM	Diagnostic and Statistical Manual
GAD	Generalized anxiety disorder
HIV	Human Immunodeficiency Virus
KNBS	Kenya National Bureau of Statistics
NACOSTI	National Commission for Science, Technology and Innovation
SPSS	Statistical Packages for Social Science
UK	United Kingdom

OPERATIONALIZATION OF CONCEPTUAL VARIABLES

Coping Strategies: In this study, coping strategies were operationalized as either adaptive or maladaptive. Adaptive coping strategies make things easier in the moment, but easier in the long run. Maladaptive coping strategies make things easier in the moment, but only make things harder in the long run.

Demographic Variables: In this study, demographic variables were operationalized as age, level of education and employment status. Demographic variables are the independent variables.

General Anxiety Disorder: This is a mental state characterized by ongoing sustained worrying, associated with various people, events, or situations. This psychological condition is often accompanied by constant nervousness, muscle tension, sweating, physical pain, insomnia, and other physiological signs of experiencing fear (Stein & Sareen, 2015). Anxiety levels range from 0 to 4 (low), 5 to 9 (mild), 10 to 14 (moderate), while 15 to 21 (severe). In this study, in order to determine GAD among the participants of this study, a cutoff point of score from 10 and above was considered as generalized anxiety disorder.

Single Motherhood: In this study, this refers to a woman who has a child or children but does not have a husband who is a man, to help with the growth and development of the child or children

Informal settlements: In this study, this refers to residential areas where the inhabitants lack infrastructures, usually congested, often being located in hazardous environment.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The chapter offers background information regarding the study. It discusses the problem statement, the purpose of the study, objectives of the study, research hypotheses, significance of the study, scope and delimitations, the assumptions and finally the chapter summary.

1.2 Background to the Study

Generalized anxiety disorder (GAD) is a mental disorder that may be induced by people, occasions, or different circumstances in life. This psychological condition is often accompanied by ongoing anxiety, tense muscles, sweating, body ache, insomnia, and other physical manifestations of fear (Stein & Sareen, 2015). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) states that GAD is identified when a patient's symptoms persist for six months or longer and they are too severe for them to be managed. Additionally, it is specified that the symptoms must interfere with functioning and must not be caused by external sources like drugs, prescriptions, or different physical or mental health issues. If the person goes through a difficult and stressful life scenario that worsens one's psychological condition, this disorder can have very negative effects (American Psychiatric Association, 2013).

Generalized anxiety disorder may be experienced across genders, and prevalence is found in literature to be consistently higher amongst females as compared to the males (Breslau et al., 2019; Mclean et al., 2021). Stein and Sareen (2015) made it known that the prevalence of generalized anxiety disorder is roughly twice as high among the females as compared to the males. Further, among women, anxiety is recorded considerably greater among single mothers than mothers who have partners (Whisenhunt et al., 2019). A single

mother may be seen as a woman who has a child or children but does not have a spouse or live with a partner to help with the child's growth. Single mothers particularly are inclined to experience higher rates of sadness, stress, fatigue and restlessness. According to Hastings et al. (2021), one of the main reasons for such psychological problems is the role and task overload. This has also been largely attributed to single mothers being generally associated with severe living circumstances that are notably suitable for creating and aggravating an anxious narrative, including feelings of great responsibility, loneliness, and care for a child as well as low financial status among other circumstances (Mclean et al., 2021).

Based on the global health estimate, the World Health Organization (WHO, 2017) established that 264 million of people were living with anxiety disorders. Depression (7.5%) was ranked as the single largest contributor to global disability, then followed by anxiety disorders (3.4%) and single mothers experience heightened GAD due to absence of the spouse who could have offered some supports in the family (Afifi et al., 2020; Colton et al., 2021). Triastuti and Herawati (2022) reported that the prevalence of generalized anxiety disorder has been found to vary with demographic characteristics, particularly age, level of education and employment status.

With regard to age, anxiety is more prevalent among youths aged between 18 and 30 years at 66.7%, as compared to respondents aged above 30 years at 33.3% (Afifi et al., 2020; Sarkisian & Gerstel, 2018). Andrade et al. (2020) also reported that age factor did affect anxiety, and the age group between 17 and 23 years was more prone to experiencing anxiety as much as 0.486 times compared to the age group between 24 and 64 years. According Broche-Pérez et al. (2020) study looked at the prevalence of anxiety in the elderly, people between the ages of 40 and 60 likely to experience anxiety more frequently than people between the ages of 25 and 40. This suggests that the occurrence of anxiety is strongly correlated with age.

Regarding work status, Van et al. (2020) noted that economically disadvantaged single mothers had higher risk of mental disorders like generalized anxiety disorder (Babalis et al., 2018). Smith et al. (2020) further stated that the percentage of single mothers without jobs (86.2%) who reported having anxiety was higher than that of those in the working-age population (13.8%). Ustun (2020) also discovered that respondents in low-income groups reported higher levels of anxiety, with 86.2% (n = 75) compared to 13.8% (n = 12) in the high-income group. The type of work appears to be strongly correlated with the prevalence of anxiety, with the unemployed and low-income groups typically reporting higher levels of anxiety.

Broche-Pérez et al. (2020) further showed that individuals who were not working are more at danger of experiencing anxiety by 0.341 times compared to individuals who are already working. Wu et al. (2020) also showed a substantial correlation between the type of work factor and the occurrence of anxiety, with a p-value of less than 0.00. It is said that people in the unemployed population are more prone to feel anxious. A similar report by Mohammadpour et al. (2020) showed that 87.7% of non-working population had severe anxiety compared to the working population. The foregoing studies show that employment status has a strong relationship with the incidence of anxiety

In the USA, Shear and Ross (2015) in their study on “anxiety disorders in women”, reported that working women were twice as likely as men to have panic disorder (5.0%), agoraphobia (7.0%), PTSD (10.4%), GAD (6.6%), social anxiety disorder (15.5%) and OCD (3.1%) being more common in single mothers. It was further revealed that anxiety disorders are prevalence and disabling. In the lifetimes of women, 1 out of every 4 female Americans is diagnosed for at least one anxiety disorder. Single mothers are at increased risk for anxiety disorders, and developmental, societal, and reproductive factors are strongly believed to be contributing factors to generalized anxiety disorder especially among the single mothers.

Literature across the globe has further associated general anxiety to single mothers (Jacoby et al., 2020). Similarly in Germany; Liang (2019) demonstrated that single mothers were two times more likely to show symptoms of anxiety. The mother's low parenting self-efficacy beliefs, the presence of at least one disabled child, and a low perception of social support are all factors that contribute to single mothers' anxiety (Sartor et al., 2023). Likewise in Saudi Arabia, Albikawi (2022) also pointed that 23.7% prevalence of generalized anxiety disorder among single mothers Avison et al. (2019). In Bangladesh, 48.8% of single mothers had anxiety disorders (Nahar et al., 2020). These studies were conducted in another geographical society, and they may not be generalized in the Kenya context, and particularly in Kibera informal settlement in Nairobi County, Kenya. This gap further gave credence to this study.

Mutanda and Mbanefo (2020) discovered that 10.3% of single mothers in Sub-Saharan Africa had a dual diagnosis and 21.2% of them suffered from anxiety disorders. The most common specific diagnosis was major depressive disorder, followed by generalized anxiety disorder. With regard to levels of education, Hastings et al. (2021) reported that general anxiety levels were significantly greater for single mothers at lower levels of education. This is in contrast to Rousou et al. (2021), who found higher prevalence of anxiety among female participants at higher education levels. Similarly, Marzo et al. (2022) found that women with a higher education level presented a higher degree of anxiety. This was particularly true among unemployed women with higher education levels, possibly owing to frustrations about not finding meaningful employment opportunities despite their education levels, coupled with family and societal expectations.

The number of married women in Cameroon who were separated, divorced, or had absent spouses rose from 78,060 in 1976 to 129,000 in 2005 (65%), while the number of widows climbed over the same period from 299,690 to 475,930 (58%) (Clark & Hamplová,

2019). More recent statistics showed 22% of women aged 20–49 in Sub-Saharan Africa were unmarried mothers by the year 2020. The percentage of single mothers ranged between 27% in Congo Brazzaville and 53% in Namibia (Ntoimo & Mutanda, 2020). According to Chadoka-Mutanda and Mbanefo (2020), premarital pregnancy was found to be the main cause of single motherhood in Gabon and Swaziland, while separation was the main cause in Congo Brazzaville. This demonstrates that single motherhood is common and correlates differ by place, despite some regional similarities. These various findings hardly report on levels of generalized anxiety disorder.

In Nigeria, Wegbom (2022) conducted research on the factors associated with stress, anxiety, and depression among pregnant patients visiting tertiary hospitals in urban centers of the country. In these groups of women, it was stated that pregnancy was not taken as a pathological state, although it heightened females' susceptibility to emotional and psychological states, like stress and anxiety. Pregnancy initiated some feeling of anxiety before and after delivery. It was reported that stress accounted for 34.6%, psychological misery of the women. Also, 23.7% and 18.5% of the women exhibited anxiety and depression, respectively. This is a study that was carried out in Abuja, and was specifically focused on pregnant women who were students whereas; this current study sought to establish the levels of generalized anxiety disorder among single mothers in Pentecostal churches in Kibera informal settlement Nairobi County, Kenya.

Statistics showed that 18% of women giving birth before marriage in Tanzania and Zimbabwe, 5% in Ethiopia, and just over 10% in Malawi (Kiberenge, 2020). Women in their late teens and early 20s are increasingly forced to take care of children alone after their male partners run away after impregnating them hence the most affected demographic in the nations (Clark & Hamplova, 2013). Reports revealed that 6 out of every 10 Kenyan women

will probably be single mothers, either because of premarital pregnancies or union breakdowns(Kiberenge, 2020).

In Kenya, Gust (2017) in his study on factors associated with psychological distress among young working women in Kisumu, Kenya reported that most women (58.4%) were considered as having moderate psychological distress, 20.8% were seen as having low, and 20.8% were considered as having high psychological distress. The sample size (461) appears insufficient for generalization in the entire Kenya society. This current study focused on single mothers in Kibera informal settlement in Nairobi, Kenya. The Kenya National Bureau of Statistics (KNBS, 2022) stated that 1.9 million teenage mothers were between the ages of 10 and 19 years, in the previous five years (2017–2021). This amounts to 380,000 people annually on average, with the majority of the impacted teenagers who are single mothers residing in informal settlements (KNBS, 2022).

Informal settlements are epitomized by Kibera, the biggest slum in Nairobi, and the biggest urban slum in Africa (Sarre,2018).Kibera informal settlements is faced with overlapping social and economic trials including high frequency of poverty, violence and HIV infections (Corburn & Sverdlik, 2019; Gibbset al., 2020).Therefore, this research was necessary as it assessed the relationship between demographic variables and general anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement Nairobi County, Kenya.

1.3 Statement of the Problem

Demographic disparities have been linked with the single mothers experienced generalized anxiety disorder as compared to mothers who are married (Afifi et al., 2020; Sarkisian & Gerstel, 2018). Level of education, age and employment status; have also been particularly found to be key stressors among single mothers (Colton et al., 2021). These

demographic variables have also been found to be strongly connected ($p = 0.00$) with incidences of anxiety in Cuban populations (Broche-Pérez et al., 2020; Hastings et al., 2021; Triastuti & Herawati, 2022; Van et al., 2020). Copeland and Harbaugh (2020) identified single mothers as group of people that was vulnerable to stressful parenting experience. When becoming parents, single mothers confront various difficulties, including lack of support, time constraints, and financial strain (Flaquer, 2018).

In these conditions, the chances that women become pregnant unintentionally leading to single motherhood are very high (Mngoma et al., 2020). At the same time, these social and economic challenges including poverty and disease present a range of stressors likely to trigger GAD among the resident single-mothers (Afifi et al., 2020). In Nigeria, Wegbom (2022) reported that stress accounted for 34.6%, psychological misery of women. Also, 23.7% and 18.5% of the women exhibited anxiety and depression, respectively.

Forceful pregnancy has been seen as one of the contributory factors to single motherhood in Kibera. Some of the women are forcefully impregnated several times, while some are also raped, and the women are left all alone to take care of themselves and their children. It is likely that this harsh experience paves way for generalized anxiety disorder on the single mothers. Also, there are some jobless single mothers who at times struggle to provide for themselves and their children. Some are sexually exploited due to their vulnerable conditions, and they may hardly refuse being exploited since they need some basic needs so as to survive (KNBS, 2023). Kenya has seen a rise in the number of babies registered by single mothers; according to an economic survey conducted by the Kenya National Bureau of Statistics, the percentage of single mother births recorded in Kibera surged from 13.5% in 2021 to 13.9% in 2022 (KNBS, 2023).

The relationship between demographic variables and generalized anxiety disorder among single mothers in Kibera informal settlement remains unexplored. This presents a knowledge gap on the link between demographic variables and GAD among single mothers in a slum setting. Informed by this setting, the current study examined the relationship between demographic variables and generalized anxiety disorder among single mothers in Kibera informal settlement, Nairobi County, Kenya.

1.4 Purpose of the Study

The purpose of the research was to examine the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

1.5 Objectives of the Study

The study was based on one general objective and three specific objectives.

1.5.1. General Objective

The objective of this research was to examine the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

1.5.2. Specific objectives

1. To establish the levels of generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.
2. To examine the relationship between demographic variables of age, level of education, employment status and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

3. To assess the coping strategies for generalized anxiety disorder used among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya.

1.6 Research Questions

This study had the following questions;

1. What are the levels of generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya?
2. What is the relationship between demographic variables of age, level of education, employment status and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya?
3. What are the coping strategies for generalized anxiety disorder used among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya., Kenya?

1.7 Significance of the Study

The study outcomes may be resourceful to various stakeholders, including mental health institutions, single mothers, the Nyumba Kumi initiatives in informal settlements in Kenya, law and policy makers and scholars in related fields.

First, the study findings may be beneficial to psychologists and psychiatrists in mental health institutions and other organizations interested in the general welfare of single mothers in the country. They will be particularly informed of which demographic categories of single mothers to focus on, in their discharge of therapy among other interventions.

In addition, the study findings may also shed light for law and policy makers in creating an enabling environment for assisting single mothers overcome GAD in the country. It may also inform the formulation of policies that support intervention and encourage help-

seeking among victims. The Nyumba Kumi initiatives in informal settlements in Kenya may also be informed on what demographic categories of single mothers to look out for, in order to offer help when needed. Single mothers may further benefit from the study findings owing to the adoption of effective intervention measures to address GAD.

Also, the research's findings, which may provide comprehensive insight in the field of counselling psychology, may also be useful to academicians working in related fields of study. Therefore, the body of information in the nation may be increased, especially in regards to the impact of demographic factors on generalized anxiety disorder among single mothers.

1.8 Scope and Delimitations

The study examined relationship between demographic variables and generalized anxiety disorder among single mothers in Kibera informal settlement, Nairobi County, Kenya. To this end, the investigation was confined to three demographic variables, which were; age, education level and employment status. This was justified, as these demographic variables have also been found to be strongly associated with incidences of anxiety, albeit focusing on different populations (Triastuti& Herawati, 2022).

In addition, the geographic scope is Kibera informal settlement, Nairobi County, Kenya. The research was conducted precisely over a six-month period. A sample of 380 participants was drawn from single mothers in eight Pentecostal Church denominations in Kibera informal settlements Nairobi, Kenya.

1.9 Assumptions of the Study

The research was based on the following assumptions, that:

1. Single mothers sampled may participate willingly

2. Single mothers in the study may give correct reflections of their experiences

1.10 Summary of Chapter

The backdrop of the study, which was based on the funnel approach, was described in this chapter. The statement of the problem, purpose, objectives, significance, underlying assumptions, and scope and delimitation were all clearly stated. The literature review is the main topic of the following chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The research variables are conceptualized in this chapter, which also focus on theoretical literature review appropriate for the investigation. An empirical literature review that aligns with the objectives and the conceptual framework are articulated.

2.2 Conceptualization of Variables

In this part, the study variables of generalized anxiety disorder and single motherhood are conceptualized.

2.2.1 Generalized Anxiety Disorder

The word “anxiety” is derived from the Latin word ‘anxietas’, which means, uneasy or troubled mind (Munir & Takov, 2017). It is a mental health disorder that produces fear, worry, and a constant feeling of being overwhelmed by circumstances which makes an individual get troubled holistically. It is characterized by extreme, persistent, and unrealistic worry about everyday things (Munir & Takov, 2017). One of the proponents of anxiety, Ardiyansyah (2019) holds that anxiety is a conflict reaction between the id aggressiveness and the ego impulsiveness. The id along the ego is seen as defence mechanisms when these conflicts arise for harmony and peace in a person’s mind. The id is the unconscious fear within a human person while the ego concentrates on the reality that confronts a person. In an encounter of events, the human mind seeks rational ways of absconding any possible danger so as to preserve oneself.

In addition, within the category of anxiety disorders, generalized anxiety disorder (GAD) is a neuropsychological condition marked by excessive and uncontrollable worrying that lasts for six months or longer (Bamalan et al., 2023). The physiological, psychological,

and molecular mechanisms that control the body's stress-reactivity are compromised by the pathogenesis, which may cause the body's homeostasis to become disturbed (Bamalan et al., 2023).

Gottschalk and Domschke (2017) stated that GAD is a moderately heritable condition of 30% possibility and the human socio-cultural environmental factors, personality types and parenting style (Munir, & Takov, 2020). Avison et al. (2019) also argued that when early developmental traumas are combined with recent traumatic experiences and events as well as a related genetic susceptibility, GAD risk is increased. Alcohol, narcotics, prescription medications, cigarettes, and even caffeine consumption are all significant risk factors. People in extremely poor socioeconomic conditions and members of marginalized population groups are more likely to suffer from the generalized anxiety disorder (Weinraub & Wolf, 2019).

GAD symptoms can impact all aspect of a person's life. DSM-5 lists irritability, attention issues, exhaustion, sleeplessness, and restlessness as typical symptoms (American Psychiatric Association, 2013). This diagnosis is made when they result in functional issues, which can range in severity, and symptoms could get worse over time. The main signs of this disease are worry and anxiousness. Anxiety could be brought by any circumstance or occurrence, or may have no connection to anything at all (Bäuerle et al., 2020). It facilitates persistent thoughts about possibly harmful or undesirable situations, which elicit feelings of fear and uneasiness. These mental images can have an impact on every aspect of life, hinder general comfort and contentment, and dramatically lower academic or professional performance. Rousou et al. (2019) argued that humans with GAD are more likely to intentionally hurt themselves, including attempt suicide. Some people require medical attention and psychotherapy because they are unable to handle the ongoing psychological stress (Cairney et al., 2021).

2.2.2 Single Motherhood

The word “singleness” in reference to human beings may be seen as the state of being alone, usually in the context of not being romantically and legally associated with a spouse or having a partner. Motherhood is a state of being a mother which is seen in the nurturing and giving tender care to a child or children (Kearney & Levine, 2021). Single motherhood may be seen as a mother or woman who is out of marriage or not married to a man either for good or bad reasons but decides in taking care of her child or children by herself without any support from the father of the child or children. Also, a single mother is a person who has a child or children but does not have a spouse or live with a partner to help with the child's parenting (Van et al., 2020). Single motherhood therefore, comes in two categories; single motherhood by choice and single motherhood by situations (Son & Bauer, 2020).

Further, Cairney et al. (2021) state that single motherhood is a consequent of separation, divorce, widowhood and children born out of marriage, and those who deliberately make the choice of not to get married, which is a trend nowadays. Due to strain, some single mothers typically feel high level of anxiety than married mothers (Copeland & Harbaugh, 2020). Some single mothers struggle with money, housing stability, childcare, job security, and support, which can be stressful to them (Mishra et al., 2021).

However, along with some of their challenges of being single, some recognized the advantages in relation to the experience of being a single mother. While the absence of a man in the life of their child worry the single mothers, they also perceive it as being the cause of less possible conflicts, calm atmosphere at home, and making all child-related decisions on their own, without argument. The exclusivity in decision making, that the single mothers cherish, relate to a high sense of competence and high levels of initiative (Kumar, 2017). For the single mothers, relationship with men came second to motherhood (Golombok et al.,

2016; Sahu, 2016). However, Cairney et al. (2021) and Weinraub and Wolf (2019), established that single mothers reported feeling more anxious and had a tendency to separate themselves from other people when compared to the married mothers.

2.3 Theoretical Framework

This study was grounded on both Lazarus' (1993) stress theory and Bernard's (2004) resiliency theory.

2.3.1 Lazarus' (1993) Stress Theory

Lazarus (1993) postulates that stress is viewed as a connection between the person and the environment. Human situations are not intrinsically good or bad, but how people interpret their situations and make judgment out of them, which may be taken as positive or negative. A particular situation or event is appraised negatively as being stressful in terms of threat, loss, or harm. The primary appraisal and secondary appraisal are the two methods in which the theorist discusses appraisal (Lazarus, 1993). The degree to which something is important to the individual is considered the primary appraisal. For instance, a conflict with a colleague may threaten the self-esteem of the employee whereas unemployment is likely to be perceived as a loss of status and income.

Secondary appraisal refers to options the human person has to cope with the harm, threat, or loss in life. These are dependent on individual features like motivation and worldviews, as well as coping mechanisms including financial resources, social skills, and problem-solving abilities; specific personality traits. The human person becomes more conscious and active in reacting to various threats around their environment. Such threat that may result to stress may include; discrimination and stigmatization of a person (Tajfel, 1981). According to Lazarus (1993), psychological stress is a particular relationship between the

person and environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her wellbeing.

Stress is a two-way process; it involves the stressors emanating from the environment, and the response of an individual subjected to these stressors. Cognitive appraisal occurs when a person considers two major factors that majorly contribute in his response to stress. These two factors comprise of; the threatening tendency of the stress to the individual, and the assessment of resources required in minimizing, tolerating or eradicating the stressor and the stress it produces. Also, problematic coping and emotion-focused coping are two different forms of coping mechanisms according to Lazarus' theory. In order to handle the cause of the problem, problematic coping involves finding a way to stop viewing stress as the issue. The idea behind emotion-focused coping is that stress is uncontrollable; hence the person is powerless to deal with the issue and such may build up to anxiety that could become overwhelming (Broussard et al., 2021).

Using this theory, the researcher intended to examine the coping strategies employed by single mothers; the challenges that come with economically disadvantaged single mothers in informal settlements present a variety of stressors, which may build up anxiety among this human population. For example, economic poverty may stress a single mother who has many children, since she does not work to earn some money to purchase food for the children. This becomes a stress that may build into generalized anxiety disorder. Also, lack of finance to service house rent, medical bills and attending to possible emergencies at home may be a precursor to generalized anxiety disorder. Also, when a single mother faces discrimination and stigmatization because of her status, the stress of being discriminated against may pave way to generalized anxiety disorder. Identity threatening situations (like being discriminated against and stigmatized) are critical sources of stress. Too many stresses may facilitate some irrationality, whereby she keeps saying to herself, "I'm-a-good-for-nothing-mother, I'm a

failure.” In life, the world is a dangerous place to live (Bamalan et al., 2023). The extent to which this anxiety builds up may be different with various demographic variables. Further, to cope with the stressors, single mothers use various mechanisms that may be adaptive or maladaptive. It is likely that a single mother may resort to too much patronization of alcohol so as to cope with her stresses, and this could cause more damages in her life.

The strength of this theory is that it considers cognitive approaches, and looks for alternative methods for handling stress. Also, the theory is not confined to discrete categorical emotions, and thus can explain a wide range of human emotional experiences. On the other hand, lack of proof, difficult to label factors that determine stress and overlap of primary and secondary appraisals are some of the weaknesses of the theory. In addition, this theory does not answer whether a human being can experience an emotion without any appraisal at all. Since the theory did not fully explain these, and adaptive way of coping with stress, the study further employed the resilience theory so as to compliment Lazarus’ (1993) stress theory.

2.3.2 Resiliency Theory

Resiliency theory was developed by Bernard (2004). The theory contends how vulnerable people might be in the face of circumstances that appear to be beyond their control. Resiliency is the capacity of an organism to overcome, or 'bounce back' from the adverse effects of a natural or man-made threat (Carlson et al., 2012). Bernard (2004) proposed four qualities as part of the resilience theory, these are: social competence, autonomy in problem-solving, and sense of purpose. The capacity to connect with friends and coworkers in a way that helps people recover constructively from setbacks is referred to as social competency. He goes on to argue that problem solving is the capacity to use critical thinking skills to actively work through challenges and discover solutions. Autonomy is relying on oneself, being assertive, and demonstrating faith in oneself. Autonomy allows

individuals to decide how they choose to embrace the challenges around them. Finding meaning amid hardship is the essence of a sense of purpose.

Single mothers may be faced with myriad situations that may contribute to pessimism about life endeavors, however, resilience may help the single mothers to surmount their challenges, and accrue hope that may help them stay positive and optimistic about life amidst the challenges they go through (Carlson et al., 2012). This theory was fitting for this research because it addressed possible ways of coping on the situations single mothers may be confronted with.

Some of the strengths of resilience theory include appreciation, generosity, hope, and bravery. These traits have demonstrated to serve as protective factors against life's harsh conditions, thereby assisting one in adapting positively and managing challenges associated with physical and mental disease. However, resilience theory has been criticized as being too concentrated on an idealized positive outcome, and also has a breaking point for most people (Fletcher & Sarker, 2013).

2.4 Empirical Literature Review

This section attempts to carry out review on literature in connection with the respective research objectives which are; levels of generalized anxiety disorder, relationship between demographic variables and generalized anxiety disorder among single mothers, and coping strategies for generalized anxiety disorder among single mothers.

2.4.1 Levels of Generalized Anxiety Disorder among Single Mothers

Generalized anxiety disorder is one of the psychological challenges capable of disrupting the holistic functioning of human life. A human being shows a certain degree of fear as well as worry in different conditions in life. Anxiety is the human emotional reaction

to danger, possibly for self-preservation. It becomes a disorder when it interferes with the holistic functioning of a person, and one is not able to function optimally. Numerous single mothers struggle financially with housing stability, childcare, and job security, which can be stressful and in turn leading to possible generalized anxiety disorder (Jbireal & Azab, 2019).

In the USA, Hill-Murray (2022) in his qualitative study explored how the Corona virus disease (COVID-19) pandemic affected economically disadvantaged single mothers. The study had 9 single mothers who participated in the transcendental phenomenological interviewing method study. The data analysis revealed 8 themes, including COVID-19 related tension and anxiety. Generalized anxiety and tension were brought on by the increasing obligations, drastic changes to their work-home lives, income reductions, and feelings of social isolation of the participants. While the study is still important now because it discusses the link between general anxiety disorder and being a single mother, it was undertaken during the COVID-19 epidemic, which had its own unique set of pressures. Therefore, the study results might not be applicable to the current study context.

Comparably, data from Germany suggests that over 30% of single moms exhibited moderate to severe symptoms of generalized anxiety and 37% of them had general stress, which is twice as high as that of mothers with partners. This is contextually different from informal settlements, and results may therefore not be generalizable to the present research context (Avison et al., 2019). Chadoka et al. (2020) held that the majority of single mothers experienced anxiety disorders, with 17.3% high, 21.2% moderate, and 10.3% being at low level of GAD. The study carried out in the USA showed significant findings; however, it used the qualitative research method, which was a phenomenological interviewing method, with a small sample size of 9 participants. This current study utilized both the quantitative and qualitative research method, with a bigger sample size of 380 participants.

In South Africa, a research was conducted by Mkhwanazia and Gibbs (2021) on risk factors for generalized anxiety disorder among young women and men in informal settlements in South Africa. The prevalence of anxiety was shown to be high among this population. The study indicated that among 484 women, 18.6 % reported moderate to severe symptoms of GAD. In addition, the nationally representative South African Stress and Health (SASH) research established that GAD was the most common mental health issue reported, with a national frequency estimated at 8.1 %. The research additionally pointed that the majority (93%) of the participants had secondary education, and only 7 % had primary education. More findings also demonstrated that 31 % reported stealing because of hunger in the past month, and lack of job opportunity increased their levels of anxiety, leading to several deviant behaviors. The study was concentrated on jobless women which was mixed with married mothers and single mothers as well as men residing in an informal settlement. This revealed their level of GAD and other deviant behaviors, while this current research is aimed at assessing the levels of GAD and as well investigating the relationship between demographic variables and General Anxiety Disorder among single mothers in Pentecostal Churches in Kibera informal settlement Nairobi County, Kenya.

In a cross-sectional study conducted in Tanzania, Mwita et al. (2021) looked into the prevalence and risk factors linked to symptoms of generalized anxiety disorders in expectant mothers who visited the Bugando Medical Center's antenatal clinic. Thus, 380 expectant mothers in all were enlisted and interviewed, utilizing the Generalized Anxiety Disorder – 7 (GAD-7) Scale. A systematic sampling approach was used to select the participants from the clinic. The study's outcome showed that the women's mean age was 30.35 (SD. 5.1), and 53.68% of them were in their third trimester. Also, 36.58% of the participants met the cutoff criterion of four for generalized anxiety disorder symptoms. The study was confined to both mothers who were married and mothers who were single, and were pregnant, while this

present study specifically focused on the levels of GAD among the single mothers in Pentecostal Churches residing in Kibera informal settlement Nairobi County, Kenya.

In Kenya, Korff et al. (2009) in their study carried out in Nyanza Province, showed the occurrence of common mental disorders, for example, anxiety, panic disorder and generalized anxiety disorder (GAD), were at 10.8%, with higher degrees of mental disorders among persons who were older and persons with poor physical health. Also, research was carried out by Gust (2017) which explored factors associated with psychological distress among young women in Kisumu, Kenya. Majority (90.9%) of the women screened were of Luo ethnicity, married or cohabiting (67.9%), had primary school education or less (68.2%), and were employed (63.4%). Nearly half (47.3%) of the women screened were 18–24 years of age. With regards to the findings from the research, it was shown that among 461 women who were the participants of the research, most (58.4%) of them were categorized as having moderate Generalized anxiety Disorder, 20.8% of the women were considered as having low GAD and 20.8% of them were regarded as having high GAD. Moderate GAD was significantly more likely among women who reported a history of forced sex and were concerned about recent food insecurity. The issues of forced sex and feeling of insecurity were contributory factors to women generalized anxiety disorder in Kisumu County.

This study by Korff et al. (2009) in Nyanza Province of Kenya argued on GAD among the women in general, whereas, this current study concentrated on specific women; the single mothers in Kibera informal settlement in Nairobi, Kenya.

2.4.2 Relationship between demographic variables and generalized anxiety disorder among single mothers

Generalized anxiety disorder is a mental disorder that is capable of disrupting and interfering with humans' endeavors to great degree. With regard to general anxiety among

single mothers, numerous instances of research have examined the correlation between single motherhood and important demographic factors such as age, education level, and employment status. For instance, Bernardi and Martnez-Pastor (2021) showed that the association between divorce and educational level is positive ($r = 0.38^{**}$, $p = 0.05$) in nations and cohorts where the prevalence of divorce is low, while the relationship is negative when divorce becomes more prevalent. About 71% of the respondents ($n = 6,246$) entered a first marriage, of which 7% subsequently ended in dissolution (McLanahan, 2021).

Similarly, Chan and Halpin (2018) note that when social and economic barriers to divorce are high and divorce is uncommon, it is more prevalent in higher social strata for financial reasons and because wealthier people have the cultural means to escape the pressure to remain married (Blossfeld et al., 2020). According to McLanahan (2021), more educated women increase their maternal resources by delaying childbearing and continuing to work after becoming mothers, whereas less educated women decrease their maternal resources because they are more likely to have children outside of marriage and become single mothers. As a result, the disparity in parental resources across children from various backgrounds widens even further and single mothers with less education struggle with GAD.

Garriga et al. (2019) conducted a comparative study of Spain and Italy with a view to examine the association between educational level of mothers and single motherhood in relation to generalized anxiety disorder. In Spain, 7 of the women were married at some point, while 30 of the participants were never married. In Italy, 9 of the participants were married at some point, while 40 of the participants were never married. According to the study, there is a negative correlation ($r = -0.11$) between educational attainment of mothers and their status as single mothers in Spain but not in Italy. It was, however, discovered that this association is also unfavorable for Italian mothers who are under 40 and for women who

are from the northwest of the country. On the other hand, this association is favorable for older mothers ($p < 0.05$ **), women from the islands ($p < 0.01$ ***), and mothers from southern Italy. However, there is no significant correlation ($p \geq 0.10$) between educational attainment and single motherhood for moms from the central and northeast regions.

The impacts of post-secondary education on the financial security of single parents were examined by Zhan and Pandey (2020). The findings showed that 7.6% of the sample had assets income. Also, postsecondary education was positively correlated ($r = 309$ ***) to various economic sources of both White and African American single mothers. Education correlated ($r = 292$ ***) with single mothers' labor income. It was noted that when the impacts of schooling and other factors were taken into account, single fathers performed better than single mothers, and White single parents performed better than their counterparts who were African- Americans. Social policies must invest more in human capital development and eliminate racial and gender discrimination in the workplace if they are to help single parents.

Kim and Kim (2020) assessed the factors affecting the quality of life (QOL) of single mothers compared to married mothers. For single and married mothers, multiple linear regression analysis was used and findings pointed out that residential instability (public rental housing: $\beta = -10.779$, $p < 0.001$; Jeonse rental housing: $\beta = -0.324$, $p = 0.01$) and alcohol-related problems ($\beta = -0.522$, $p < 0.001$) were independent factors affecting lower QOL, whereas professional job status ($\beta = 8.452$, $p = 0.037$) was independently associated with higher QOL in single mothers. However, these factors were not associated with the QOL of married mothers. Compared to married mothers, single mothers displayed a lower quality of life. Increased age was significantly positively correlated with the QOL in the single mother group ($r = 0.208$, $p < 0.01$), whereas age was negatively correlated with the QOL in the married mother group ($r = -0.150$, $p < 0.01$).

While the results relate to factors affecting the quality of life (QOL) of single mothers compared to married mothers, this may not be generalized in the present context as the study sample was drawn from South Korea. The present study investigated demographic variables and generalized anxiety disorder among single mothers.

In Ghana, Ayebeng et al. (2022) intended to examine single parenthood trends and factors in Ghana. Data from the last five waves of the Ghana Demographic and Health Survey were used to create this publication. Single motherhood was studied using descriptive statistics of proportions with the Chi-square test and binary logistic regression. The findings gave an impression of single mothers being over-represented among economically poor women. Chadoka-Mutanda and Mbanefo (2020) investigated the correlates of single motherhood in the chosen nations using the most recent data from the Demographic and Health Surveys of four sub-Saharan African nations: Congo Brazzaville (2011), Gabon (2012), Namibia (2013), and Swaziland (2006–2007). The population of interest was women aged between 15 and 49 years who were either married or single and had at least one dependent child. Single mothers ranged between 27% in Congo Brazzaville and 57% in Namibia. In all four nations, Generalized anxiety disorder among single motherhood was found to be correlated ($p = 0.000$) with their demographics such as age, educational level, economic and employment and the number of children.

In Kenya, anxiety has been seen as one of the most prevalent mental disorders that quite often goes unnoticed among some of the women. It also co-occurs with other depressive disorders and has common risk factors. It was stated that anxiety mostly occurs with single mothers when they perceive, interpret and experience an event which is threatening to the self. Anxiety emanates from insufficient economic rewards to attend to different responsibilities. The reality of anxiety among women could hardly be disproved based on

several factors (Carlos et al., 2014). Clark, Henderson and Kabiru (2023) conducted a study on single motherhood and stress in a Kenyan slum. They argued that severe poverty combined with a lack of safety assistance may make some mothers' mental health and wellbeing especially reliant on social support, and that this can lead to anxiety to varying degrees. The study found that financial support was associated ($p=0.007$) with lower levels of maternal stress, formerly-married mothers reported more stress than married women by approximately 0.29 standard deviations. The study was on single motherhood and stress, whereas this current study focused on the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

2.4.3 Coping Strategies on general anxiety disorder among single mothers

Single mothers are reported to face a myriad of socio-economic challenges including poverty, mental health issues among a host of other challenges brought on by single motherhood (Cheeseman, 2019). In Australia, Son and Bauer (2020) also show how different support systems, like those provided by employers, educators, and the community, work. Family resilience is the capacity to handle difficulties in life, including those confronted by single mothers, successfully. Single mothers might find strength and a feeling of community by having a strong support system and family network. Beauchamp et al. (2018) suggest that having a strong family support system is one of the most important factors to a single mother. Broussard et al. (2019) categorize coping strategies adopted by single mothers as either adaptive or maladaptive. Research has shown numerous adaptive coping mechanisms used by single mothers from having pets, exercise, resilience, humor, counseling, arts and volunteering (Beauchamp et al., 2018).

Similarly in the United States of America, Williams (2021) assessed the link between stress, coping mechanisms, and social support in the context of single mothers. This survey

was completed by 173 mothers, a convenience sample. Mothers who were between the ages of 20 and 55 and had at least a high school diploma were eligible to participate in this study. According to an independent samples T test, results related to perceived stress between single mothers and married mothers revealed $t(171) = 1.98, p = .050$. In addition, findings showed significant differences between single mothers and married mothers, $t(171) = -3.33, p = .001$; social support/ socializing, $t(171) = -2.76, p = .006$; practical assistance, $t(171) = -3.51, p = .001$; social support financially, $t(171) = -2.88, p = .004$; and social support advice-wise, $t(171) = -2.85, p = .005$. The study was however not specific to single mothers in informal settlements, and therefore they may not be generalizable to the present context. Also, Pakan (2024) in his study in the USA reported that 2 out of 5 of the participants stated that time of anxiety, counseling helped to change the participants' patterns of thinking from a negative outlook to a positive outlook. This has found to be helpful in counseling for counselors and clients to set obtainable goals for the future. The second participant reported; "Counseling has given me strategies for dealing with reducing anxiety". Participant four reported; "counseling, helped me manage personal crisis" and "reduce anxiety to a manageable level". This addressed learning coping skills to deal with anxiety through counseling.

In the UK, Hamilton (2020) studied coping mechanisms in 30 low-income households, 24 of which were headed by single mothers. This was a qualitative research method, and in-depth interviews with 30 families were carried out. Findings showed that the majority of the participants were jobless. Also, it was found that poor single mothers cope in their situation by engaging in conspicuous consumption, buying the fanciest cars, clothes, and technology to blend in and avoid stigmatization. The study came to the conclusion that people who used this coping mechanism would simply conceal their existing state of poverty. It was challenging to make physical efforts to prevent the stigmatization's effects. In Turkey, Karaca and Şener (2021) in their study found that a vast majority of the mothers ($n=25$)

stated that praying and reading the bible comforted them in times of anxiety; ‘I simply pray at any moment. I read the bible when I get the chance. It makes me feel calm’ (Participant 5). ‘The only thing that comforts me is praying. Sometimes at night I wake up and pray. And I recite with my prayer beads all the time’ (Participant 21). The study of Hamilton (2020) was however conducted in the United Kingdom, and findings from an advanced economy with notable socio-economic differences from Kibera informal settlements. The findings may therefore not be generalizable to the present context.

In Ghana, Fiadzo and Osei (2018) explored the coping mechanisms of single parents in the Kpedze traditional area. Using purposive and snowball sampling, a total of 30 single parents were chosen, including 23 females and 7 males. Four out of six communities were chosen for the study using a simple random selection methodology. The data gathered for the study were examined using thematic analysis, and the following themes emerged; petty trading, child trafficking, fostering, denying oneself of personal comforts, mortgaging property, and remarriage are just a few of the methods used by single parents to cope with their socioeconomic issues as revealed by the research. One significant coping technique that has been identified is foster care. Additionally, the study demonstrates that some coping mechanisms disadvantage single-parent families and may exacerbate issues rather than resolve them.

In their study, Choi et al. (2014) found that women in South Africa drank when faced with stressors; they were driven to use alcohol as a coping mechanism to support social interaction, emotion regulation, and a feeling of empowerment; and even though the women drank to manage anxiety. Women related the initial onset of their hazardous drinking to life stressors and anxiety. “When I started drinking I had anxiety,” said one woman. “My marriage isn’t right... That’s why I drink so much,” said a woman who had recently separated from a husband who was abusive and unfaithful.

The study by Fiadzo and Osei (2018) however observed both single mothers and fathers. The study conducted in South Africa was in a different geographical location and the various findings may therefore not be generalizable to the present context, hence the need for this current study.

In Kiambu County in Kenya, levels of self-esteem of single mothers and their strategies for dealing with stigma were investigated by Kimani (2020). A variety of sampling approaches were used, including stratified, snowball, and basic random sampling. The method of coping used by respondents was assessed using a scale developed by the researcher. The degree and direction of the association between these two variables were determined using inferential statistical analysis utilizing Pearson's Correlation test. Focus group discussion (FGD) qualitative data were subjected to textual thematic analysis. It was found that majority of participants used healthy coping mechanisms. According to study results, there was a significant low negative correlation ($r = -0.389, p < 0.05$) between stigma and self-esteem levels among single mothers in Kiambu County, Kenya. Additionally, it showed that single women in Kiambu County use healthy coping mechanisms while raising their children. The research however concentrated on stigma and self-esteem, which are conceptually different from generalized anxiety disorder.

There were the intervening variables which are adaptive and maladaptive coping. The conceptual framework explained the likelihood that there was a relationship between variable A and variable B, and the intervening variable.

2.6 Chapter Summary

The study variables were conceptualized in this chapter. The review of empirical literature was conducted in accordance with the objectives of the study. It went on to address other pertinent variables for the study. An illustrated representation of the correlations between variables A and B was provided by the conceptual framework. The methodologies suitable for the study are covered in the next chapter.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter, the target population, sample technique and sampling size determination is covered. The chapter also discusses the research instrument, validity and reliability, trustworthiness, pre-testing of instrument, data collection process, data analysis procedures, ethical consideration, then the anticipated impact of the research, reflexivity and the chapter summary.

3.2 Research Design

A research design stipulates the methodology that the researcher will take to answer research questions (Cooper & Schindler, 2013). In this regard, the study will use the mixed method research design to carry out the investigation. In order to better understand a research problem, a mixed method research design is a process for gathering, analyzing, and "mixing" both quantitative and qualitative elements simultaneously but within a broader quantitative design (Creswell & Creswell 2018).

This research design was divided into two phases. In the first phase, the researcher used the correlational research design. In the second phase, qualitative data was collected through recorded audio interviews and then transcribed and analyzed thematically, and this responded to the research objective three, which explored coping strategies for generalized anxiety disorder among single mothers in Kibera informal settlement, Nairobi County, Kenya.

3.3 Location of the Study

The research took place in Kibera informal settlements in Nairobi County, Kenya. Nairobi County is situated at in South-Central Kenya, 140 Kilometers (87 miles) south of the Equator. It is surrounded by 113 km² (70 mi²) of plains, cliffs and forest that makes up the city's Nairobi National Park. It is adjacent to the eastern edge of the Rift Valley, and to the west of the city, are The Ngong Hills. Nairobi County is one of the 47 counties of Kenya. Based on the population census conducted by Kenya National Bureau of Statistics in 2019, Nairobi City County was 4,397,073, and it is the most populous city in East Africa (KNBS, 2019)

In the specific location of this study, which is Kibera informal settlement, the place is plagued with high unemployment and underemployment rates, scarcity of clean water and diseases caused by poor hygiene (Soma et al., 2022). Cases of teenage pregnancies, rape and HIV infections are common, and consequently, there is a high proportion of single motherhood in the settlements (Seal et al., 2018). The researcher found this location appropriate for this study, and sought to examine the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya.

3.4 Target Population

Creswell and Creswell (2012) see target population as a group of humans with some general features that can be picked and studied by a researcher. Kibera is the largest informal settlement in Nairobi, covering approximately 2.5 square kilometers (UN Habitat, 2018). The population is estimated at 1,000,000 people (Chief Kibera, 2023). For this study, the target population comprised of single mothers who were members of Pentecostal Churches, in Kibera informal settlements in Nairobi, Kenya. Information given by pastors from respective

churches (2023) revealed that the overall registered number of single mothers in Kibera was 7,450.

3.5 Sampling Design

According to Mugenda and Mugenda (2013), a sample is a group of people from which research data will be collected. The section details the sampling frame, sampling technique and the sampling size determination formula that were employed in the research.

3.5.1 Sampling Frame

This is the list of the entire population of a researcher's interest from which the sample is chosen (Bryman, 2016). In this study, the sampling frame was drawn from the list of the number of single mothers in eight Christian Church denominations in the Kibera informal settlements, and the Churches included; Miracle revival fellowship, United Pentecostal Church, Full gospel Church, Victory Pentecostal Church, Adonai Gospel Church, Glory Pentecostal Church, African Independent Pentecostal Church, and Nabii Church. Hence, Table 1 shows the possible sampling size for single mothers who were members of Pentecostal Churches, in Kibera informal settlements in Nairobi, Kenya.

Table 1*The population of the study*

Church Denominations	Single Mothers
Miracle revival fellowship	1500
United Pentecostal Churches	1000
Full Gospel Church	2000
Victory Pentecostal Church	750
Adonai Gospel Church	700
Glory Pentecostal Church	650
African Independent Pentecostal Church (AIPC)	350
Nabii Church	500
Total	7450

Source: Pentecostal Church Association (PCA, 2024)

In Table 1, the target population of this study was single mothers, who were residents of Kibera informal settlements in Nairobi, Kenya, drawn from eight Churches with their respective target population. Each of the Churches had the following population of single mothers. Miracle Revival fellowship =1500, United Pentecostal=1000, Full Gospel Church = 2000, Victory Pentecostal Church = 750, Adonai Gospel Church = 700, Glory Pentecostal = 650, African Independent Pentecostal Church (AIPC) = 350, and Nabii Church =500 (Pentecostal Church Association, 2024).

3.5.2 Sampling Technique

Aggarwal and Ranganathan (2019) stated that simple random sampling permits researcher to randomly select subset of individuals from a target population where each member of the group has equal opportunity of being selected for participation. Simple random technique is usually used in quantitative research, and this permitted the researcher to select suitable number of participants for statistical analysis of the study. A piece of paper will be made available with an inscription of “Yes” and “No”. Participants who pick yes will

be invited to participate in the study, while participants who pick No will not participate in the study. Table 2 further presents simple random technique.

Table 2

Simple Random Sampling Technique

Locations	Target Population	Sample Size	Percentile
Miracle Revival fellowship	1500	71	18.7%
United Pentecostal Church	1000	53	14.7%
Full Gospel Church	2000	125	33.5%
Victory Pentecostal Church	750	38	9.3%
Adonai Gospel Church	700	35	7.7%
Glory Pentecostal Church	650	16	5.7%
AIPC	350	15	3.7%
Nabii Church	500	27	6.7%
Total	7450	380	100%

Pentecostal Church Association (PCA, 2024)

According to Table 2, this research employed the simple random sampling method to get sample sizes. This was achieved by using a computer-based Random Number Generator. The predicted and precise number of respondents, who took part in the study, was provided by Computer-Based Random-Number Generator (CBRNG) at random. Data was obtained from eight Churches locations and their respective target population. In order to arrive at the sample size of each of the Churches; the target population of each Church was divided by the total population of the study (7450) and then multiplied by total sample size (380).The percentiles were obtained from the target population from each Church after carrying out the following calculations; the target population of each Church was divided by total target population (7450) and then multiplied by 100% so as to get the percentile of each Church. In this regard, the target population at Miracle Revival fellowship (1500) had a sample size of 71 (18.7%), United Pentecostal Church (1000) with a sample size of 53 (14.7%), Full Gospel

Church (2000) had the sample size of 127 (33.5%), Victory Pentecostal Church (750) with a sample size of 38 (9.3%), Adonai Gospel Church (700) utilized a sample size of 35 (7.7%), Glory Pentecostal (650) with a sample size of 16 (6.7%), African Independent Pentecostal Church (350) had a sample size of 15 (3.7%) and Nabii Church (500), had the sample size of 27 (6.7%). Therefore, 380 participants (including 10% of 380 = 38, for addressing attrition) who are single mothers were chosen when the appropriate numbers of participants from each Church have been chosen, and they were requested to complete the questionnaires. Also, the researcher used the purposive sampling technique to select 15 participants who were part of the quantitative sample size, to take part in the qualitative method.

3.5.3 Sampling Size Determination

The researcher computed the desired sample size using the Yamane (1967) formula to get the desired sample size as showcased below:

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n = sample size

N= Population Size

e = margin of error=0.05

Therefore,

$$n = \frac{7,450}{1 + 7,450(e)^2}$$

$$n = \frac{7,450}{19.625} = 379.6$$

Thus, the sample size of this research was rounded up to 380 participants; out of this, 15 participants were picked from this sample size (380) for qualitative interviews so as to respond to research objective three.

In order to mitigate the issue of attrition in data collection within the sample size, an additional 10% of participants and questionnaires will be included specifically for this purpose. According to Mugenda and Mugenda (2011), attrition in sample size refers to participant loss, participant withdrawal, or damage to a study questionnaire during data collection. Mugenda and Mugenda (2011), hold that 10% is enough to address attrition. Due to this, an additional 38 participants were added and $10\% \text{ of } 380 = 38$. Thus, with respect to the concern of attrition, the total sample size was 418 participants.

3.6 Research Instruments

Kumar (2011) stated that appearance of the research tool, introduction to respondents and instructions for completion are crucial. This study employed a standardized questionnaire. Part A consisted of demographic information of the participants which included age, level of education and employment status. Part B was on Generalized Anxiety Disorder-7 (GAD-7). Generalized Anxiety Disorder-7 (GAD-7) questionnaire was developed by Spitzer et al. (2006). It contains seven items measuring worry and anxiety symptoms. Assigning scores of 0 for not at all, 1, for a few days, 2, for more than half the days, and 3, for virtually every day results in the scoring criteria for the GAD-7. The GAD-7's seven items have a total score that can range from 0 to 21. Anxiety levels range from 0 to 4 (low), 5 to 9 (mild), 10 to 14 (moderate), while 15 to 21 (severe). In order to determine GAD among the participants of this study, a cutoff point of score from 10 and above was considered as generalized anxiety disorder.

In order to look at the research objective three which assessed the coping strategies for general anxiety disorder among single mothers in Kibera, which was qualitative method, 15 participants were interviewed. They were picked from the quantitative sample size. An interview guide was used to facilitate the collection of qualitative data. The researcher determined the content validity of the interview guide through the supervisors so as to assess whether the interview guide represented all the areas needed to be explored with the respondents.

3.6.1 Validity

Validity is the accuracy of a measure, the extent to which a study tool really measures what they are supposed to measure and it is achieved by checking how well the results correspond to established theories and other measures of the same concept (Chiang 2015). To make sure that the questionnaire items accurately measure what they are intended to measure, both construct and content validity will be assessed. To ensure construct validity, the study conducted a confirmatory factor analysis, while expert opinions were sought from the project study supervisors for content validity. In previous studies, the Generalized Anxiety Disorder (GAD-7) was used in a study conducted by Mills et al. (2014) among university students in the USA, and it was discovered to be valid with greater internal consistency, and with the coefficients statistically significant and greater than 0.75, suggesting good validity.

3.6.2 Reliability

The reliability of a research tool is the extent to which a research instrument consistently has the same results if it is used in the same situation on repeated occasions (Saunders et al., 2016). The Generalized Anxiety Disorder was used in a research done by Dhira et al. (2021) in Bangladesh. Reports show that the reliability coefficient Cronbach's alpha for the overall GAD-7 scales is 0.895, which is greater than the recommended value of 0.80 suggesting strong reliability. In this regard, the researcher also checked for internal

consistency in the questionnaires to ensure reliability. This was assessed utilizing the Cronbach's alpha measure of consistency. In line with Nunnally (1978), a 0.70 Cronbach's alpha coefficient was regarded as reliable.

3.7 Trustworthiness

According to Nyirenda et al. (2020) trustworthiness in the context of qualitative research has to be Credible, Dependable, Transferable and Confirmable. In this study, credibility helped to ascertain whether the participants are saying the truth or they are faking information by giving more than is imagined. Credibility was achieved by the use of rephrasing of questions by the researcher or reversing questions so as to capture the truth. The researcher preferred to use credibility in this context as an approach of participants responding to the questions, by applying active listening techniques on both verbal and non verbal communication.

In addition, in order to validate the qualitative questionnaire, the researcher used several means to validate the instrument; a pre-testing was conducted, and the feedback was used to adjust any changes in areas that may not be clear to the participants. Also, the researcher had a discussion on the instruments with the research supervisors to ascertain whether the format and the questions were capturing what it intended to capture.

3.8 Pre-testing of Instruments

Prior to the main study, the study conducted pre-testing of research instruments by checking for both validity and reliability. In this regard, 38 equivalents of 10% of the sample size of 418 were used for the pre-testing. Mugenda and Mugenda (2003) backed this process and recommended that 1-10% of pre-test sample was enough. During the pre-testing, the participants were different from the main respondents of the study, and the researcher, therefore choose a different location for the pre-testing. Pre-testing of research instrument was conducted in Mukuru informal settlement in Nairobi County which provides equivalent

characteristics of the population under investigation. The pre-testing of instruments possibly informs the researcher whether the instructions attached to the instrument were understood by the respondents of the study. The Cronbach's alpha was conducted in order to determine the reliability of the instruments. The Cronbach's alpha was .710.

3.9 Data Collection Procedures

The researcher sought a letter of authorization from the Tangaza University Research Ethics Committee (TUREC), and approval from the National Commission for Science, Technology and Innovation (NACOSTI). Before questionnaires and interviews were administered, the researcher sought the informed consent of the respondents. All the respondents were assured of confidentiality and their free-will to either participate or withdraw from participation.

In order to collect data from different locations of the study a letter of authorization was also requested from the eight Churches. The researcher obtained free and informed consent from the respondent. One degree-holding research assistant was recruited by the researcher, and was trained in the distribution, completion, and collection of questionnaires from respondents.

The participants from each of the Churches were invited from their respective church, upon an agreed date, and were requested to participate in the study. Since participants of this study fell within 8 Pentecostal Churches, eight days were assigned to meet with the participants in each Church on a respective day. Questionnaires were distributed to the participants and they were given 25 minutes to respond to the questions, and thereafter, debriefing was conducted by a profession counsellor. Also, interviews were carried out among the participants on a one-to-one basis. Since the participants of the qualitative design were 15, five days were used to carry out the interviews whereby, at daily basis, three

interviews were conducted. The participants were interviewed at their Church hall. The researcher also discussed informed consent to record with the participants. Information gathered from the participants is to be stored in the repository of Tangaza University College. The time allocation for each interview was 20 minutes.

3.10 Data Analysis

In this research, quantitative data collected was analysed with the use of descriptive and inferential statistics. Table 3 further demonstrates a detailed quantitative data analysis, and also qualitative analysis.

Table3

Data Analysis

Data analysis of:	Variable type	Purpose of the test	Type of the test
Demographic Characteristics	Categorical	Gather information about demographics Characteristics	Frequencies, percentiles.
Objective One	One scale	To measure the levels.	Descriptive statistical score.
Objective Two	One scale & three variables	Test relationship between 1 scale & 3 continuous variables.	Pearson's Correlation Coefficient.
Objective Three	Qualitative Data	Gather information on coping strategies on GAD	Thematic analysis

According to Table 3, after the collection of data from the participants, the researcher assessed the questionnaires for completeness after which coding and entry of the data followed. Data analysis was performed using Statistical Packages for Social Sciences (SPSS) version 25. Descriptive analysis of this study involved frequency and percentages; while inferential analysis included Pearson Coefficient correlation. Based on research objective one, levels of generalized anxiety disorder among single mothers was scored and measured

using descriptive statistical score so as to gauge the levels of GAD, and presented in a summary table. The Pearson's Coefficient Correlation analysis was used to investigate the research Objective two; which sought to examine the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya.

In addition, qualitative data was collected from the participants; and an audio recording of participants' content was carried out. The researcher recruited a transcriber to work with her in order to go through the responses. Audio recording was transcribed to verbatim. The researcher carried out proofreading, spell checking to get rid of errors, as well as proper punctuation such as the commas, full stops, and exclamations. The researcher read the transcribed data several times for familiarization in order to carry out systematic thematic analysis.

3.11 Ethical Considerations

The researcher obtained ethics clearance from Tangaza University Institutional Scientific Ethics Review Committee (TU-ISERC). Also, permission from NACOSTI, letters of authorization from pastors of the eight Pentecostal Churches, and informed consent from the participants of the study. The researcher then proceeded to conduct data collection. The researcher put into consideration some of the fundamental principles of research. The researcher guaranteed that in the entire research process, ethics in research were observed.

Permission was sought by the researcher from the pertinent authorities prior to data collection. The study particularly ensured that information given by participants is exclusively utilized for addressing the research objectives and for academic purpose. The participant's right to decline to answer the questionnaire was respected by the researcher. The researcher exercised extreme caution to avoid pressuring participants to provide information

that they do not want to divulge. So as not to violate privacy of respondents, the researcher respected their opinions anytime they chose not to provide information that is private to them.

Additionally, respondents were guaranteed that their information would be kept confidential. The researcher took care in this regard to avoid publishing any information given in confidence or sufficient personal information to reveal the identities of the respondents. To ensure this, the researcher refrained from using personal identifiers such as names, addresses, and dates of birth, among others. Confidentiality was further observed through adequate data security and management. The researcher had no intention of harming anyone, and there was no deception during the research.

In order to collect data from different locations of the study, a letter of authorization was requested from the eight Churches. The researcher obtained free and informed consent from the respondent. One degree-holding research assistant was recruited by the researcher, and was trained in the distribution, completion, and collection of questionnaires from respondents. Interviews were carried out among the participants on a one-to-one basis by the researcher herself who has knowledge of research ethics and the interview process. Since the participants of the qualitative design are 15, five days were used to carry out the interviews whereby, at daily basis three interviews were conducted. The participants were interviewed at their Church premises. The researcher also discussed informed consent to record with the participants. The time allocation for each interview was 15 minutes, since the data was for objective three only. Information gathered from the participants is to be stored in the repository of Tangaza University College after the research is completed for a period of 2-5 years.

Dissemination of the research findings may be published in an academic journal. Presentations to participants may be done through church seminars to allow in-depth

discussions and feedback. Additionally, the study abided by the standards of integrity to prevent plagiarism. By reporting techniques, methods, results, data, and publication status as honestly as feasible, the study assured objectivity. There was no any manufactured, false, or misrepresented data. By appropriately crediting sources using in-text citations and referencing, the study further avoided plagiarism.

3.12 Envisaged Impact of the Study

It was anticipated that through its outcomes and corresponding recommendations, the study may highlight the relationship between demographic variables and generalized anxiety disorder among single mothers in Kibera informal settlement, Nairobi County, Kenya. This may result in the formulation of appropriate intervention practices that may target the most needful demographic categories of single mothers in the settlements. This may in turn result in a mentally healthy single mother population in Kibera and similar settlements throughout the country, who may not only effectively bring up their children, but also productively add to the socio-economic progress of society.

The research findings, which provided insight and new information in the field of counselling psychology, may also be useful to academicians working in related fields of study. Therefore, the body of information in the nation may be increased, especially in regards to the impact of demographic factors on generalized anxiety disorder among single mothers.

3.13 Reflexibility

Nilson (2016) highlights the aspect of reflexibility as a journey of reflective development. It is geared towards building respect, relationships and ensuring reciprocity. The author also acknowledges that judgment is a natural act and therefore reflexibility is used as a tool to

examine different view points and put into context presumptions and preconceptions. In this study, the researcher used observation of verbal and non verbal approaches. This helped in capturing emotions and feelings of participants and not perceptions nor presumptions of the researcher.

Furthermore, the use of writing materials and note books helped jot down narrations and experiences of the participants of this research. This were stored as hard copies under safe custody of the researcher. With the help from the assistant, the researcher compared notes to help eliminate personal opinions and be able to articulate data without bias but rather have objectivity meeting the intended purpose. By use of systematic data guide the non-verbal expressions was captured and later on given an interpretation through the symbols chart. The voice recorder helped in capturing accurate data and not researchers views and opinions.

3.14 Chapter Summary

The chapter carried out explanations on the target population, sample technique and sampling size determination. It also discussed the research instrument, validity and reliability, trustworthiness, pre-testing of instrument, data collection process, data analysis procedures, ethical consideration and the anticipated impact of the research and reflexivity. The next chapter focuses on the findings of the study.

CHAPTER FOUR

FINDINGS

4.1 Introduction

This chapter presents findings of the study, beginning with the response rate of the research. It gives the reliability statistics of Generalized Anxiety Disorder (GAD) scales. It further articulates the demographic characteristics of participants, and culminates with findings of the study in connection with the objectives of the study respectively.

4.2 Response Rate

In this section, the response rates of the questionnaires distributed to the research participants of this study are presented. Table 4 demonstrates the distributions of the questionnaires.

Table 4

Response Rate

Sample Size	Distributed Questionnaires	Returned Questionnaires	Spoiled Questionnaires	Properly filled Questionnaires
380	418	418	15	403

As seen in Table 4, the sample size of respondents was 380. In order to address the concern of attrition, the researcher added 38 extra questionnaires to address attrition rates (10% of 380), to make up 418 questionnaires and distributed to the participants. Out of the 418 questionnaires that were distributed, 418 were returned to the researcher, and 15 of the questionnaires got spoiled and hence discarded. The remaining 403 questionnaires were properly filled and were used for data analysis. Therefore, this research had a 95.7% response rate. Sataloff and Vontela (2021) contend that a questionnaire response rate of 70% and above is sufficient for drawing a relevant inference on the area of the study.

4.3 Reliability of the Generalized Anxiety Disorder (GAD)

A test was conducted to find out the reliability of the internal consistency of the Generalized Anxiety Disorder (GAD). To determine the accuracy and relevance of the scale items, a Cronbach's alpha (α) in the reliability analysis was used in SPSS version 24 which according to Cronbach (1951), the alpha analysis of $\alpha < .5$ is considered undesirable; $\alpha \leq .6$ is considered poor; $\alpha \geq .7$ is considered acceptable; $\alpha \geq .8$ is considered good; and $\alpha \geq .9$ is considered excellent. Findings of the analysis are presented in Table 5.

Table 5

Reliability of Scale

Name of scale	Cronbach's Alpha	Number of Items
Generalized Anxiety Disorder (GAD)	.710	8

As seen in Table 5, results of the reliability test showed that the Generalized Anxiety Disorder (GAD), on a 5-point Linkert scale had an alpha of $\alpha = .710$, having the total number of 8 items and this is considered acceptable.

4.4 Demographic Characteristics

This section presents the demographic characteristics of the participants of this study. This includes; age, level of education and employment status. The findings are tabulated in Table 6.

Table 6

Demographic Characteristics

Age	Frequency	Percent
15-19 years	0	0%
20-34 years	328	81.4%
35-44 years	66	16.4%
45-64 years	6	1.5%
65 years and older	3	.7%
Total	403	100.0%

Levels of Education		
No formal education	8	2.0%
Primary level	37	9.2%
Secondary level	321	79.7%
Tertiary	37	9.2%
Total	403	100.0%

Employment Status		
Permanent and pensionable	34	8.4%
Casual	155	38.5%
Self-employed	174	43.2%
Unemployed	40	9.9%
Total	403	100.0%

Findings in Table 6 indicated that majority (81.4%, n = 328) of the participants were between the ages 20-34 years, this was followed by the ages 35-44 years, being at 16.4% (n =66). Regarding level of education, it was found that 79.7% (n= 321) of the women had attained secondary school, while 2.0% (n = 8) of the women had no formal education.

Statistics further pointed that most (43.2%, n =174) of the participants were self-employed, while 9.9 % (n = 40) of the participants were unemployed.

4.4.1 Demographic Characteristics of interviewed Participants

This section presents the demographic characteristics of the interviewed participants. This includes; age, level of education and employment status. The findings are presented in Table 7.

Table 7

Demographic characteristics of interviewed participants

Participants	Age	Level of education	Employment Status
Participant 1	29	Secondary School	Casual job
Participant 2	37	Primary school	casual job
Participant 3	24	Secondary School	businesses
Participant 4	33	Secondary School	casual jobs
Participant 5	60	Secondary School	casual jobs
Participant 6	24	Secondary School	Casual job
Participant 7	23	Diploma	Employed
Participant 8	27	Degree	Unemployed
Participant 9	24	Secondary School	Self-employed
Participant 10	25	Secondary School	Self-employed.
Participant 11	51	Primary School	Self-employed
Participant 12	59	Primary School	Self-employed
Participant 13	53	Secondary	Self-employed
Participant 14	30	Diploma	Self-employed
Participant 15	29	College	Casual jobs

As shown in Table 7, most of the interviewed participants (n = 8) were in their twenties, while the other participants were within 30 years and above. It was also revealed that most of the participants had secondary education, and some had attended college

degrees. Employment status revealed that participants with casual job and self-employed were equal.

4.5 Levels of Generalized Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera Informal Settlement in Nairobi, Kenya

The first objective of this study was to establish the levels of generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya. Descriptive statistical analysis was conducted, and data was computed and scored so as to measure the levels of GAD. Based on the GAD scale, 7 statements were used to measure the levels of generalized anxiety disorder (GAD). The Generalized Anxiety Disorder (GAD-7) is on a scale ranging from 0-3, where; 0 = Not at all, 1 = Several days, 2 = More than half the days, and 3 = Nearly every day. The total score can range from 0 to 21. Anxiety levels range from 0 to 4 (low), 5 to 9 (mild), 10 to 14 (moderate), while 15 to 21 (severe). The results are illustrated in Table 8.

Table 8

Levels of Generalized Anxiety Disorder among Single Mothers

Levels	Frequency	Percentage
Low	3	0.7%
Mild	100	24.9%
Moderate	139	34.5%
Severe	161	39.9%
Total	403	100%

Findings as shown in Table 8 revealed that 39.9% (n = 161) of single mothers scored severe level of generalized anxiety disorder, while some of the single mothers were at low level of generalized anxiety disorder (0.7%, n = 3).

4.6 Relationship between Demographic Variables and Generalized Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya

The second objective of this research was to examine the relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya. The Pearson correlation analysis was conducted between demographic of age and generalized anxiety disorder. The findings are illustrated in Table 9.

Table 9

Relationship between Age and Generalized Anxiety Disorder among Single Mothers

		Age	Generalized Anxiety Disorder
Age	Pearson Correlation	1	.482
	Sig. (2-tailed)		.035
	N	403	403
Generalized Anxiety Disorder	Pearson Correlation	.482	1
	Sig. (2-tailed)	.035	
	N	403	403

As seen in Table 9, resulted indicated that there was a positive relationship ($r = .482$, $p = .035 \leq 0.05$) between age and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

4.6.1 Relationship between employment status and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

The Chi-square test was conducted to determine the relationship between employment status and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya. The outcomes are given in Table 10.

Table 10

Case Processing Summary						
	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Employment status * GAD	403	92.8%	0	0.0%	403	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	63.211 ^a	48	.043
Likelihood Ratio	67.878	48	.031
Linear-by-Linear Association	.872	1	.350
N of Valid Cases	403		

a. 45 cells (66.2%) have expected count less than 5. The minimum expected count is .18.

As seen in table 10, the Chi-square test indicated that there was a significant relationship (Chi-Square value = 63.211a, df = 48, p-value = .043 ≤ 0.05) between employment status and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

4.6.2 Relationship between level of education and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

The Chi-square test was used to determine the relationship between level of education and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya. The results are shown in Table 11.

Table 11

Case Processing Summary						
	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Education level * GAD	403	100%	0	0.0%	403	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	62.108 ^a	48	.000
Likelihood Ratio	65.211	48	.050
Linear-by-Linear Association	12.815	1	.000
N of Valid Cases	403		

a. 54 cells (79.4%) have expected count less than 5. The minimum expected count is .04.

As seen in Table 11, the outcome of Chi-square test revealed that there was a significant relationship (Chi-Square value = 62.108^a, df = 48, p-value = .000 ≤ 0.05) between level of education and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

4.7 Coping Strategies for Generalized Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya.

The third objective of this study was to assess the coping strategies for generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya. Qualitative interviews were carried out among 15 single mothers. Recorded interviews were transcribed and thematic analysis was conducted. The following themes emerged as coping strategies for generalized anxiety disorder among single mothers; counseling, the practice of Christian spirituality, engaging in alcohol use and sharing.

Counseling

Interviews with the single mothers widely showed that counseling was a valuable resource that helped the single mothers cope with anxiety. Some of the single mothers pointed:

It reaches a time where you can get overwhelmed with thoughts and you may start thinking about committing suicide, peer pressure gets to you. So, getting someone who can counsel you will help you to calm down and control your anger (Respondent 9, 24 years old, 4th December 2023).

Another participant shared a similar thought of the usefulness of counseling among the single mother. She postulates that counseling does not only help her cope with anxiety but also prevents the possibility of extreme mental health outcome like engaging in suicidal ideation or committing suicide;

Counseling would help because without that counseling, so many people think of committing suicide. Others can even just stay in the house and think of how they could just go and take alcohol or even buy and swallow some poisoning so that they can die. So, with the counselling, I get the counsel and guidance on how to navigate through life. Then I am able to calm down, listen and understand the counsellor, then I can be safe (Respondent 10; 25 years old, 5th December 2023).

In similar stance, another participant expresses the crucial nature of counseling which plays a significant role in her life as single mothers;

...Just to add on that, counselling helps when you do not want to keep sharing with people close to you. At times you might tell them your problems and they go ahead to gossip about you, yet you specifically went to them for help. With a counsellor, you will tell them your issues and they will not tell anyone. They will also give you sound advice that will help you (Respondent 12, 59 years old, 5th December, 2023).

Counseling can be effective in tackling mental health challenge like anxiety, being faced by the single mothers. One of the single mothers held that speaking to a counselor was imperative;

I actually liken a counsellor to a doctor, because you will go to a doctor with your illness and will not hear them tell another patient or doctor about it. So, in my opinion counsellors are very important. We just lack the finances to access them. We have been praying for our church to offer such services to us, the congregants for so long (Respondent 11, 51 years, 5th December 2023)

Another participant asserted;

As an usher at my church, I meet church members facing mental challenges and it is painful that I cannot help. If there would be a way to get counselling services at a church level at a small fee then it would be so helpful (Respondent 13, 53 years old, 6th December, 2023)

It is likely that untreated anxiety can lead to several mental health problem and other physical health conditions which may include; developing high blood pressure, increased risk of heart attack and other physiological conditions.

Practice of Christian Spirituality

The participants of this study showed that the Christian spirituality was one of the strategies they use in coping with anxiety. The Christian spirituality possibly demonstrates their connectedness with the God, who is capable of resolving human issues. One of the participants postulated;

Heh, by the way I thank God. God helps me by giving me the morale and motivation. I see others going through the same and I tell myself that at least I am going through as much as they are. Better my problem. So, I thank myself for staying that way. I give myself the motivation, I have hope, I am not stressed and I have no problems. Sometimes I say I am okay because once you say you have problems, they surely find you.I just stay...stay calm and soothe my heart because if you get mad or so stressed, you can even get hit by a car on the road. So, you have to calm your nerves, stay in the house, pray if you want to leave the house and ask God to calm you down to avoid getting into accidents...because you are going to leave your child behind and so many unfortunate things could happen. As you head out for

your casual job, you dedicate and leave everything to God (Respondent 2, 37 years old, 2nd December, 2023).

Additionally, another participant held that she carries out some Christian practices like reading the bible and praising God;

Personally, I will take my bible and read because I know that when I read the word of God, I shall feel better. If I still feel troubled, I keep pushing on, trying not to over think. Over thinking will just bring forth a lot of illnesses like hypertension and diabetes. I also listen to music and I relax (Respondent 12, 59 years old, 5th December 2023)

One of the participants held on the power of prayer, as one of the spiritual exercises in handling anxiety in her life as single mother;

I will pray and stay calm. Let your heart stay calm and don't get angry. As a single mother, you have to pray to God for strength and try not to get upset because when you do, you might do something that is regrettable like physically abusing your child by unreasonable caning. You may even end up committing suicide. With my problems...The church can be very helpful, but not all churches. You can help yourself in church but you also need to take the personal initiative to pray for yourself. If you devote yourself and work hard, you can manage well because your mind is free from dependency on other people and you avoid going on the wrong side of anger...Again with this condition you cannot relate well with others. When you stay well, pray and work hard, people might not even notice that you are going through a lot of problems (Respondent 5, age 60, 3rd December, 2023).

The utmost fears of a single mother are the lack of basic needs and insufficient income to cater for the children and themselves. Such an experience may accelerate the possibility of anxiety that could be pathological.

Engaging in Alcohol Use

This study shows the patronization of alcohol consumption among single mothers in Pentecostal Churches, as coping strategy on anxiety. The single mothers may be faced with different life challenges. Negative life experiences could push single mother to engage in alcohol which may be detrimental to their health. One of the single mothers spoke about her use of alcohol in coping with anxiety;

Yes, drinking helps significantly. So significantly, because, by the time you are using them, it is like you are in another world by yourself. You get high and that is how I see it helping (Respondent 10, 25 years old, 5th December, 2023).

Another participant also revealed her experience of anxiety which enable the habit of patronizing alcohol consumption as a way of coping with anxiety;

I don't use drugs. When I am anxious and worried, I can take alcohol but I don't use drugs. When I take alcohol, I feel much relaxed mentally for a moment. Still...but when you get used to taking alcohol, you know your money reduces (Respondent 2, 37 years old, 3rd December, 2023).

Also, participants held that alcohol use was another way of solving the issue of anxiety in her life, even though drinking does not necessarily provide physical solution. The participant asserted;

I don't think drugs can help, but drinking yes, coz at the end of the day, even if you drink like right now, at the end of the day you will get sober and the issue that you originally had, like say unemployment will still be there. It doesn't solve anything. Drinking only helps me to escape at the moment (Respondent 8, 27 years old, 4th December, 2023)

Alcohol is a psychoactive substance which produces complex psychological effects that exerts some degrees of influence on human feelings. Alcohol use among the single mothers may be seen as a maladaptive coping strategy in resolving mental health challenge like anxiety.

Sharing with Others

The single mothers have shown to be actively and deliberately taking initiative on providing solutions in militating, against anxiety. It is likely that in sharing, feelings are verbalized which to a greater extent eases one's feeling of being worried about life. One of the participants articulated her position in sharing with others, which to a greater degree helped her feel better and as well cope with anxiety;

Speaking up helps if you have someone close to you talk to them, because a problem shared is a problem half solved. If you speak to someone who is close to you and understands you will feel better (Respondent 14, 30 years old, 6th December, 2023).

It was also indicated by another participant that;

“...and also talking to people who adore me even if it is just for that moment. When I talk to them, I feel lighter.....So, those are things that I indulge in to escape some of these things (Respondent 7, 23 years old, 4th December, 2023)

Opening up to speak to a fellow mother can be very therapeutic and relieving especially when one realizes that one is not alone in one’s problem, like anxiety. A participant revealed;

Speaking to other mothers helps too, because when you are there thinking about how beaten you are, another mother will come to you complaining about one thing or the other and you realize you are not the only one having it rough. You give each other advice, encourage each other and move together (Respondent 12, 59 years old, 5th December, 2023)

It was also revealed by one of the participant that;

Staying with other people, do not stay lonely. When you are in the company of others sharing and talking, you don’t think too much (Respondent 3, 24 years old, 2nd December, 2023)

Sharing may be one of the good ways of managing anxiety. In as much as sharing helps, going out and mixing with others could increase the possibility of being calm and relax. A participant gave her view;

What would help is going out in public, mixing with people, opening up and being just yourself, being normal, and it will help you a lot to forget the things that are behind. It will motivate you. You will be like, if this person is going through this, mine is small, and you will find yourself working harder than before...yeah...(Respondent 6, 24 years old, 3rd December, 2023)

The participants of this study vividly revealed sharing as one of the possible ways of coping with anxiety.

4.8 Chapter Summary

This chapter presented the findings of the study, which started with the response rate of the participants. It gave the reliability of Generalized Anxiety Disorder (GAD) scale. It further showed the demographic details of participants. It ended with the outcomes of the study in its respective objectives. The following chapter concentrates on the discussions based on the objectives.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter discusses the findings from the analyzed data. Discussions are carried out in accordance with the objectives of the study, which focused on the levels of generalized anxiety disorder among single mothers, relationship between demographic variables and generalized anxiety disorder single mothers, and coping strategies for generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya. Discussion of findings is confirmed with the existing literature.

5.2 Participants Demographic Characteristics

The socio-demographic characteristics express a combination of attributes that define people in a study population (Fakhrul & Akter, 2019). In this study, age, level of education and employment status were considered. It was found that majority (81.4%, n = 328) of the participants were between the ages 20-34 years, this was followed by the ages 35-44 years, being at 16.4% (n =66). It was also found that 79.7% (n= 321) of the women had attained secondary school, while 2.0% (n = 8) of the women had no formal education. Statistics further pointed that most (43.2%, n =174) of the participants were self-employed, while 9.9 % (n = 40) of the participants were unemployed. Most of the participants who were interviewed (n = 8) were in their twenties, while the other participants were in their thirties and above. It was also revealed that the highest level of education attained among the participants was secondary school, while a few number had College degrees. Employment status revealed that some of the participants were self-employed, some had casual job, while some were not employed. There was a distribution of age in this study and most of the single mothers had attained formal education at different levels. Hence, these results show that age,

level of education and employment status are correlated to generalized anxiety disorder. These findings can be linked with those of Chadoka-Mutanda and Mbanefo (2020) in their study among single mother of four sub-Saharan African nations: Congo Brazzaville (2011), Gabon (2012), Namibia (2013), and Swaziland (2006–2007).

5.3 Levels of Generalized Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera Informal Settlement in Nairobi, Kenya

Findings revealed that 39.9% (n = 161) of single mothers scored severe level of generalized anxiety disorder, followed by 34.5% (n = 139) of the single mothers were at moderate level of generalized anxiety disorder, while 24.9% (n = 100) of the single mothers had mild generalized anxiety disorder. This is indicative that the single mothers in Pentecostal Churches are faced with the issue of anxiety. The outcome is a matter of serious concern. It is possible that the single mothers are struggling not just to take care of themselves but their children as well. Being the only one who takes care of the family can be demanding as one makes enormous effort to carter for the family.

The presence of severe anxiety and moderate anxiety among the single mothers strongly reveal the struggles they experience as mothers. Severe anxiety could be characterized by extreme, persistent, and unrealistic worry about everyday things which may interfere with one's day to day activities and the holistic functioning of a person (Munir & Takov, 2017). Severe anxiety may be experienced when life becomes so unbearable. Different factors may be responsible for severe anxiety, which are; joblessness, chronic sickness, lack of social support, lack of basic needs (Kearney & Levine, 2021). Jbireal and Azab (2019) amplify this by asserting that numerous single mothers struggle financially, with housing stability, childcare, sickness and job security, which can be stressful leading to possible generalized anxiety disorder. This experience can lead to several negative outcomes.

Affirming this stance, Rousou et al. (2019) submit that humans with generalized anxiety disorder are more likely to intentionally hurt themselves, including attempting suicide. Some people require medical attention and psychotherapy because they are unable to handle the ongoing psychological stress (Cairney et al., 2021).

The findings of this current study confirmed the findings of Avison et al. (2019) in Germany. They established that roughly 30% of single mothers showed moderate and high generalized anxiety and 37% general stress, twice as high compared to mother who had partners. These findings are also similar with the findings of Chadoka et al. (2020) in the USA. Their study revealed that the majority of single mothers experienced anxiety disorders, with 17.3% high, 21.2% moderate, and 10.3% being at low level of GAD.

This study also confirms the findings of Mkhwanazia and Gibbs (2021) in South Africa. Their study was focused on risk factors for generalized anxiety disorder among young women and men in informal settlements in South Africa. The prevalence of anxiety was shown to be high among this population. The study indicated that among 484 women, 18.6 % reported moderate to severe symptoms of generalized anxiety disorder. Additionally, the nationally representative South African Stress and Health (SASH, 2021) research established that generalized anxiety disorder was the most common mental health issue among the women, with a national frequency estimated to be at 8.1 %. Mwita et al. (2021) in Tanzania also found that 36.58% of the single mothers were symptomatic for generalized anxiety disorder. The findings of this current study corroborated the findings of Gust (2017) who investigated factors associated with psychological distress among young women in Kisumu, Kenya. Reports revealed that among 461 women, most (58.4%) of the women were categorized as having moderate generalized anxiety disorder, 20.8% of the women were considered as having low GAD and 20.8% of them were regarded as severe high generalized anxiety disorder.

5.4 Relationship between Demographic Variables and Generalized Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

It was found that there was relationship between demographic variables and generalized anxiety disorder among single mothers, age; ($r = .482, p = .035 \leq 0.05$), employment status; ($r = .154, p = .043, \leq 0.05$) and level of education; $F(6.478, 399), p = .000 (p \leq 0.05)$. These findings likely demonstrate that the higher the age, the more a single mother feels she has greater responsibility of providing for the family, as age comes with a deeper sense of awareness which calls one to action; to nurture and sustain the family. Clark and Hamplova (2013) contend that the more the single mothers are advanced in age, the more they make effort to respond to their responsibilities despite the challenges they experience. As such, women in their late teens and early 20s and above are increasingly forced to take care of children alone after their male partners run away after impregnating them, hence the most affected demographic in any nation. This increases the rates of anxiety among single mothers (Clark & Hamplova, 2013). With regards to employment status and its relation to generalized anxiety disorder, lack of employment opportunities and lower level of education could prevent one from meeting up with one's responsibilities as a single mother. A single mother may naturally feel obligated to care for one's children, and when the resources are not there, it may increase the chance of anxiety since one does not have good paying job and also having lower level of educational qualification may hardly attract good job opportunities.

Hastings et al. (2021) put it that generalized anxiety levels are significantly greater for single mother at lower levels of education and low paying job. Levels of education, age and employment status have also been particularly found to be key stressors among single mothers (Colton et al., 2021). However, Marzo et al. (2022) in their study state that women with higher education level presented a higher degree of anxiety. This was particularly true

among unemployed women with higher education levels, possibly owing to frustrations about not finding meaningful employment opportunities despite their education levels, coupled with family and societal expectations. Broche-Pérez et al. (2020) further show that single mothers who are not working are more at danger of experiencing anxiety by 0.341 times compared to individuals who are already working.

The finding of this current study is consistent with the findings of Garriga et al. (2019), who conducted a comparative study between Spain and Italy. The study's findings of Italy revealed that there was a relationship between educational level and generalized anxiety for older mothers ($p < 0.05$ **), women from the islands ($p < 0.01$ ***), and mothers from southern Italy. However, this current study finding contradicts the findings of Garriga et al. (2019) in Spain. The study established a negative relationship ($r = -0.11$) between mothers' educational attainment and their status as single mothers. Also, the findings of this study correspond to the study of Kim and Kim (2020) in Korea. They found that job status ($\beta = 8.452$, $p = 0.037$) was strongly associated with higher anxiety in single mothers.

The single mothers of different ages, those with lower educational level and employment status at the Pentecostal Churches may be helped with psychological support and skills that could enhance positive ways of looking at their experience as they advance in age.

5.5 Coping Strategies for Generalized Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera Informal Settlement in Nairobi County, Kenya

The participants of this study revealed the following as their coping strategies; counseling, the practice of Christian spirituality, engaging in alcohol use and sharing with others. In this study, the participants view counseling as a valuable strategy that could be utilized in addressing generalized anxiety disorders. Counseling is a crucial resource that can

be used in dealing with mental health issues like anxiety. It gives people the opportunity to engage in a professional helping relationship that may facilitate healing and gaining insight in one's experience. Counseling is critical for single mothers, since they experience so many challenges in life. The challenges they experience possibly build up to anxiety that could be moderate or severe. Aloka and Ndunge (2014) affirm that anxiety mostly occurs when an individual perceives, interprets or experiences an event which is threatening to the self. Some situations that trigger anxiety may range from lack of basic needs to joblessness and a pandemic to a mere idea of uncertainty about the future. Stoklosa et al. (2011) also submit that untreated anxiety can lead to several mental health problems and other physical health conditions which may include; developing high blood pressure, increased risk of heart attack and other physiological conditions (Goodwin & Stein, 2013). Counseling is an intervention strategy that may assist in reducing anxiety, as well as improving an individual's overall quality of life (Kaplan et al., 2014; Watson., 2014).

The finding corroborated the findings of Beauchamp et al. (2018) in Australia. They found that single mothers used counseling as an adaptive coping mechanism on generalized anxiety disorder. The findings of this current study are similar with the finding of Pakan (2024) in the USA. It was reported that 2 out of 5 of the participants stated that in moment of anxiety, counseling helped to change their patterns of thinking from a negative outlook to a positive outlook. This was found to be helpful in counseling for counselors and clients to set obtainable goals for the future. The second participant reported, "Counseling has given me strategies for dealing with anxiety". In addition, the third participant reported, "knowing that my feelings are normal and that things will get better". This quote spoke to the development of hope through counseling. Participant four reported counseling, "helped me manage personal crisis" and "reduce anxiety to a manageable level". This addressed learning coping skills to manage anxiety by going for counseling (Pakan, 2024).

Regarding Christian spirituality, the Christian spirituality has been seen as one of the fundamental areas of interest to many people due to its significant positive effect on human experiences. The participants of this study affirmed the effect of Christian spirituality in their lives. Afen and Egunjobi (2023) opine that spirituality is an individual experience and strong believe in a higher being that is sacred; omniscient and omnipotent. Spirituality is an expression of connectedness with the Supreme Being, who is God, and who lives among humans and who is capable of intervening in human situations (Chukwunonye et al., 2020; Campbell et al., 2010). It can be seen that the single mothers in Pentecostal Churches use the Christian spirituality as an intervention to anxiety, since God is the ultimate healer and consoler. The findings of this study show that the single mothers embrace spirituality as a fundamental source of strength to their mental health challenge, like anxiety. Severe anxiety may be a threat not only to human holistic functioning, but the extinction of life.

These findings are consistent with the findings of Karaca and Şener (2021) in Turkey. The study found that a vast majority of the mothers (n = 25) stated that praying and reading the bible comforted them; 'I simply pray at any moment. I read the bible when I get the chance. It makes me feel calm' (Participant 5). 'The only thing that comforts me is praying. Sometimes at night I wake up and pray. And I recite with my prayer beads all the time' (Participant 21). Embracing spirituality may be a helpful way of getting divine strength, consolation, motivation, calmness and hope in one's existential challenge like generalized anxiety disorder. The Church may intensify more spiritual programs for the single mothers and possibly assign some days to listen to the single mothers in the Church. Furthermore, the participants of this study held that engaging in alcohol use and sharing with others were some of the coping strategies on generalized anxiety disorder. Additionally, anxiety can affect anyone, and it can be more severe with single mothers who are fully responsible for the family welfare and their own lives (Esia-Donkoh et al., 2011). Family responsibility is one

that calls for a collaborative effort among partners. In the case where personal and family responsibilities are all taken care of by a single mother who lacks the basic resources and support, the possibility of anxiety may be experienced. Sharing with others has been found to be one of the effective coping strategies on anxiety. Sharing may be comprised of talking to a loved one in the family, opening up to trusted friends about one's issue, being in the company of good friends, and making an effort to seek help from families, friends and Church members. Alcohol use is not necessarily motivated by its dopamine but also anxiety and other mental health conditions (Görgülü et al., 2016).

The findings of this study are consistent with the findings of Choi et al. (2014) in South Africa. It was reported that women drank in the context of stressors; they were motivated to use drinking as a coping strategy in order to facilitate emotion management, social engagement, and a sense of empowerment; and although the women drank to cope with anxiety. Women related the initial onset of their hazardous drinking to life stressors and anxiety. "When I started drinking I had anxiety," said one woman. "My marriage isn't right... That's why I drink so much," said a woman who had recently separated from a husband who was abusive and unfaithful.

Alcohol use among the single mothers may be seen as a maladaptive coping strategy in resolving mental health challenge like generalized anxiety disorder. The Church may work in collaboration with mental health professionals, by organizing seminars on various adaptive ways of coping with anxiety, rather than indulging in maladaptive coping strategies that could be inimical to one's health.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the summary of the findings and the conclusions. It further articulates policy recommendations and future research recommendations.

6.2 Summary of Findings

The study focused on relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera Informal Settlement, Nairobi County, Kenya. The research had a 95.7% response rate. It was found that majority (81.4%, n = 328) of the participants were between the ages 20-34 years, this was followed by the ages 35-44 years, being at 16.4% (n =66). Regarding level of education, it was found that 79.7% (n= 321) of the women had attained secondary education, while 2.0% (n = 8) of the women had no formal education. Statistics further pointed that most (43.2%, n =174) of the participants were self-employed, while 9.9 % (n = 40) of the participants were unemployed. It was also revealed that the highest level of education attained among the participants was secondary education, while a few number had College degrees. Also, employment status revealed that participants with casual job and self-employed were equal.

On the first objective of this study, results revealed that 39.9% (n = 161) of single mothers scored severe level of generalized anxiety disorder, while a very few number of the single mothers were at low level of generalized anxiety disorder (0.7%, n = 3) among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

The outcomes of the second objective showed that there was significant positive relationship between demographic variables age, level of education and employment status

and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi, Kenya.

The third objective indicated that the single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi Kenya use the following coping strategies on anxiety. These are: counseling, the practice of Christian spirituality, engaging in alcohol use and sharing with others.

6.3 Conclusion

This study concluded that single mothers experience GAD, while a very few number of the single mothers were at low level of generalized anxiety disorder. The study established that there were significant relationship between demographic variables and generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya. The study showed that the single mothers cope with anxiety through counseling, practice of Christian spirituality, engaging in alcohol use and sharing. Generalized anxiety disorder has been identified as one of the mental health challenges that confront the single mothers. This study therefore achieved its general and specific objectives. In line with the study findings, the researcher set to make some recommendations.

6.4 Recommendations

The study made the following recommendations;

I. Single Mothers

The single mothers in the Pentecostal Churches may make an effort to share their struggles and also seek psychological support. The single mothers who were at moderate and severe level of generalized anxiety disorder to be helped through counseling so as to possibly identify underlying issues that could be responsible for moderate and severe levels of generalized anxiety disorder.

II. Pentecostal Church Leaders

Pentecostal Church leaders could intensify their effort in reaching out to single mothers and listening to them. This may facilitate more effective strategy in handling generalized anxiety disorders. The single mothers of different ages, those with lower educational level and employment status at the Pentecostal Churches may be helped with psychological support and skills that could enhance positive ways of looking at their experience as they advance in age

III. Counselling Psychology Practitioners

Counseling psychology practitioners may be called upon to render effective counselling services to the single mothers. They could organize seminars on psychological topics for the single mothers in order to broaden their understanding about mental health issues and effective coping strategies. They could be informed of the relationship between demographic variables and generalized anxiety disorder among single mothers.

6.5 Recommendations for future research

This study suggests the following areas for future research, and they are presented as follows:

A comparative study may be conducted on the relationship between demographic variables and generalized anxiety disorder among single mothers and mothers who are married. This may reveal the differences of generalized anxiety disorder between the two populations.

A corresponding study could be carried out in different geographic location in Kenya, on the relationship between demographic variables and generalized anxiety disorder among

single mothers. The new study could adopt the same methodology and instruments as the current study.

A qualitative study may be conducted exploring factors contributing to generalized anxiety disorder among single mothers.

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APPENDICES

APPENDIX A: Introduction Letter

Tangaza University College
Nairobi, Kenya.

21/5/2023.

Dear participant,

I am a master's degree student in Counselling Psychology at Tangaza University College, Nairobi, Kenya. I am conducting a study investigating the relationship between Demographic Variables on General Anxiety Disorder among Single Mothers in Kibera Informal Settlement, Nairobi County, Kenya. This study is undertaken in partial fulfilment of a degree in Masters of Arts in Counselling Psychology. I am humbly requesting you to participate in this study by responding to a series of questions. This task will take approximately 25 minutes. Kindly read and understand the questions before answering them. Participation in this study is voluntary and there are no monetary rewards. All information provided will be kept confidential. Your identity will not be revealed. Withdrawal from participation at any time is permissible without any consequence.

Thank you for your time.

Yours sincerely,

Loice Abwao.

APPENDIX B: Informed Consent

Statement to be signed by the participants

I confirm that the researcher has keenly explained fully the nature of the study and the series of questions that I will carry out. I confirm that I have understood the nature of the task. I understand that my participation is voluntary and that I may withdraw at any time during the research without having to give a reason. I hereby agree to take part in this study by filling in the questionnaire.

Signed by participant..... Date.....

Signed by researcher..... Date.....

APPENDIX C: Questionnaire

Section 1: Demographic Characteristics

This questionnaire has two sections namely: Section 1 = Demographic characteristics of participants, and section 2 = General Anxiety Disorder. The findings of this research will be used strictly for academic purposes only. All the information you share will be kept strictly confidential. Kindly respond to all questions provided in the two sections.

1. Please indicate your age category by placing a tick (✓) in the box

15—19 years []

20—34 years []

35—44 years []

45—64 years []

65 years and older []

2. Please indicate your highest education level

No formal education []

Primary level []

Secondary level []

Tertiary/University []

3. Please indicate your employment status

Permanent and pensionable []

Casual []

Self-employed []

Unemployed []

Section 2: Generalized Anxiety Disorder

Kindly indicate your degree of agreement with the following statements by circling each for an item on a scale ranging from 0-3, where; 0 = Not at all, 1 = Several days, 2 = More than half the days, and 3 = Nearly every day. Over the last two weeks, how often have you been bothered by the following problems?

	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid, as if something awful might happen	0	1	2	3

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all

Somewhat difficult

Very difficult

Extremely difficult

Source: Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD-PHQ). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues. For research information, contact Dr. Spitzer at ris8@columbia.edu. PRIME-MD® is a trademark of Pfizer Inc. Copyright© 1999 Pfizer Inc. All rights reserved. Reproduced with permission.

APPENDIX D: Interview guide

Relationship between Demographic Variables and General Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera Informal Settlement, Nairobi County, Kenya

Research objective

RO – 3 To assess the coping strategies for generalized anxiety disorder among single mothers in Pentecostal Churches in Kibera informal settlement in Nairobi County, Kenya.

Interview questions

1. How would you describe a single mother with GAD
2. How do you control yourself from Anxiety?
3. How do you seek social support
4. What do you do to plan and solve your problems?
Problem
5. What motivates you in accepting responsibility
6. What is your escape avoidance

Probing Questions

- a) Is there any difference between single mothers with GAD, and mothers with partners who have GAD?
 - b) What do you think are the symptoms of GAD
- a) How is your inward strength?
 - b) What are your positive personal values?
- a) What kind of support do you get from family members?
 - b) Why would you need support
- a) How do you think counselling would help?
 - b) What else would be of help?
- a) How do you manage to persevere?
 - b) How is your financial independence?
- a) How does alcohol help in this situation?
 - b) How about drugs?

APPENDIX G: Permission to use Generalized Anxiety Disorder (GAD-7) Questionnaire

20th May 2023

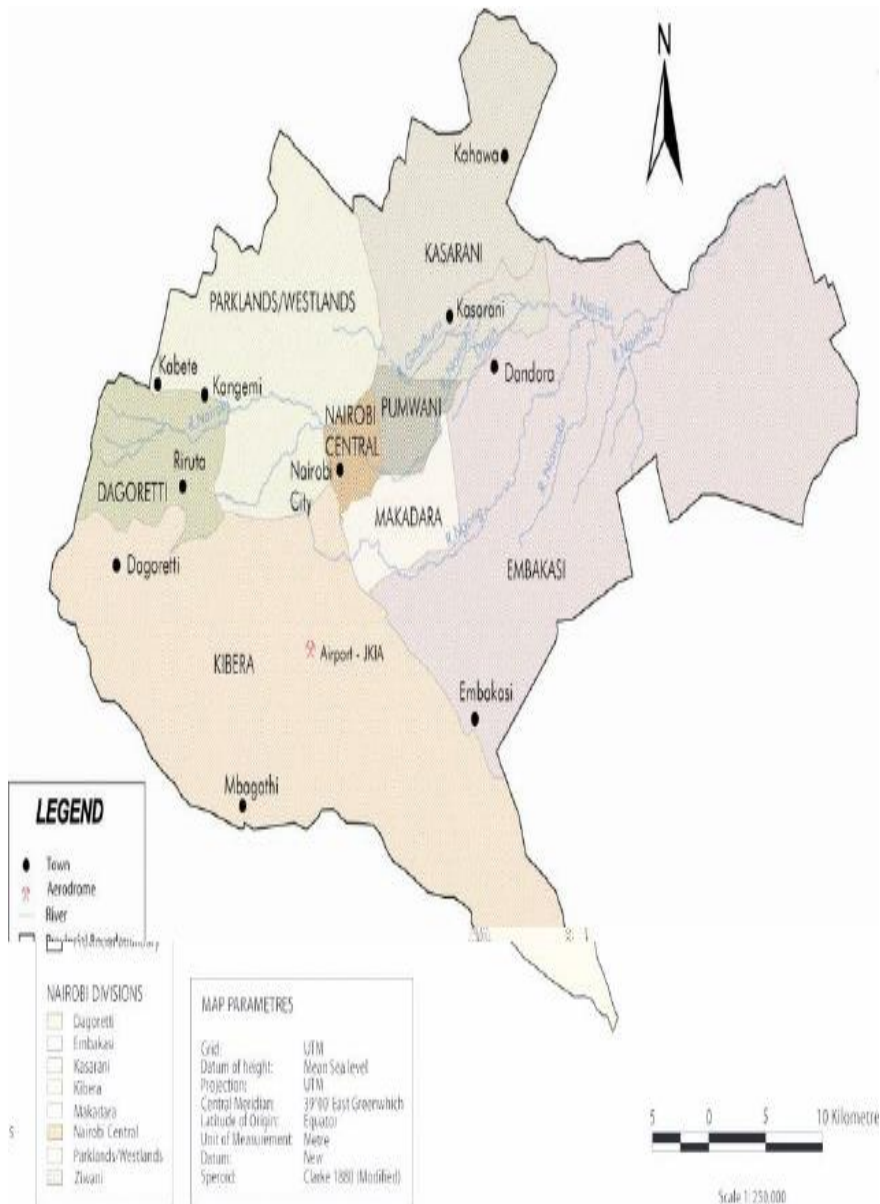
Dear Spitzer et al.

I am a Master's degree student at Tangaza University College, Nairobi. Tangaza University College is one of the constituent Colleges of the Catholic University of Eastern Africa, in Nairobi- Kenya. At the moment, I am carrying out my research proposal; investigating the Influence of Demographic Variables on General Anxiety among Single Mothers in Kibera Informal Settlement, Nairobi County, Kenya. This research Proposal is one of the basic requirements for the Degree of Master of Arts in Counseling Psychology. I came across your publication and therefore noticed your Generalized Anxiety Disorder (GAD-7) questionnaire. This will contribute profoundly to my research. I humbly wish to seek your permission to use your scale (GAD -7) in my research. I thank you for your amazing contribution in the field of Psychology.

Sincerely,

Loice Abwao.

APPENDIX H: Map of Nairobi County



APPENDIX I: Scoring of Scale GAD-7

Generalized Anxiety Disorder-7 (GAD-7) questionnaire was developed by Spitzer et al. (2006). It contains seven items measuring worry and anxiety symptoms. Assigning, scores of 0 for not at all, 1 for a few days, 2 for more than half the days, and 3 for virtually every day. Results in the scoring criteria for the GAD-7. Scores are summed up. The GAD-7's seven items have a total score that can range from 0 to 21. Anxiety levels range from;


0 to 4 (low),

5 to 9 (mild),

10 to 14 (moderate)

15 to 21 (severe).

APPENDIX K: Ethics Clearance by Tangaza University College



TANGAZA UNIVERSITY COLLEGE

The Catholic University of Eastern Africa

DIRECTORATE OF RESEARCH & POSTGRADUATE STUDIES

E-mail: dir.pgsrc@tangaza.ac.ke Website: www.tangaza.ac.ke

OUR Ref: DPGSR/ER/11/2023

Date: 2nd November 2023

Loice Afwande Abwao
Institute for Youth Studies
School of Arts & Social Sciences
Tangaza University College

Dear Loice,

RE: ETHICS CLEARANCE FOR LOICE AFWANDE ABWAO, REG. NO. YS79/00005/2021


Reference is made to your letter dated 23rd October 2023 requesting for ethical clearance of your research proposal to carry out a study on “*Relationship between demographic variables and general anxiety disorder among single mothers in Pentecostal Churches in Kibera, Nairobi County-Kenya*”.

I am pleased to inform you that, your research proposal has been reviewed and you can apply for research permit from the National Commission for Science, Technology and Innovation (NACOSTI). This should be done before commencing the data collection. You are also advised to adhere to the code of ethics as regards the protection of human subjects during the entire process of your study.

This approval is valid for one year from **3rd November 2023**.

Please, ensure that after the data analysis and final write up, you submit a soft copy of the thesis to the Director of Research – Tangaza University College for records purposes.

Yours sincerely,



DR. DANIEL M. KITONGA (Ph.D.)
Director, Research
Tangaza University College

CC: Dr. Alice Nzangi – Programme Leader, M.A. Counselling Psychology (IYS)

P.O. Box 15055 - 00509 Langata, Nairobi Kenya
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Email: inquiries@tangaza.ac.ke
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APPENDIX L: Letter of Introduction-Tangaza University College



TANGAZA UNIVERSITY COLLEGE

The Catholic University of Eastern Africa

OFFICE OF THE DIRECTOR OF RESEARCH & POSTGRADUATE STUDIES

E-mail: dir.pgsr@tangaza.ac.ke Website: www.tangaza.ac.ke

OUR Ref: DPGSR/ER/11/2023

Date: 2nd November 2023

To The Commission Secretary,
National Commission for Science, Technology and Innovation
P.O. Box 30623,
Nairobi – Kenya.

Dear Sir/Madam,

Re: Research Permit for Loice Afwande Abwao

This is to confirm that the person named in this letter is a student at Tangaza University College (TUC). She is registered in the Institute for Youth Studies (Reg. No. YS79/00005/2021) and she is pursuing M.A degree in Counselling Psychology.

Loice has met all our provisional academic requirements leading to data collection. However, she cannot proceed to the field before getting a Research Permit from the National Commission for Science, Technology and Innovation (NACOSTI). Kindly assist her to process the permit for data collection for her M.A. Thesis.

Thanking you in advance for your cooperation

Yours sincerely,



Dr. Daniel M. Kitonga (Ph.D.)
Director of Research

CC:

Dr. Alice Nzangi – Programme Leader, M. A. Counselling Psychology (IYS)

APPENDIX M: Letter of Introduction from the Pastor of the researcher to Pentecostal Churches in Kibera Nairobi County Kenya.



Anglican Church of Kenya
DIOCESE OF NAIROBI
ACK ST. BARNABAS PARISH, OTIENDE
P.O.Box 41573-00100 Nairobi, Tel: 0734 051 015 Email: ackst.barnabas@yahoo.com

11/12/2023

TO WHOM IT MAY CONCERN.

REF: DATA COLLECTION.

Receive Christian greetings in the name of our Lord Jesus.

I am Ven. Canon Philip Mbuthia, a Vicar of the Anglican Church Kenya at St. Barnabas parish Otiende. I present Mrs. Loice Abwao who is a member in our church as well as the Development chairperson and patron of the praise team. She is a Master student at Tangaza University doing her Masters of Arts in Counselling Psychology. She is in her final year doing her thesis on Topic: Relationship between Demographic Variables and General Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera Informal Settlement, Nairobi County, Kenya.


She therefore wishes to collect data in Pentecostal churches in Kibera informal settlement.


I write to confirm that I am very much aware about it and I kindly request for your support and any assistance that she may need in this period in order to accomplish this requirement in her studies. Thank you so much as you endeavor to help her in this journey.

Ven. Canon Philip Mbuthia - 0720255556

*Listen..... Have faith in God and his prophets and you
will be established and successful. 2 Chro 20:20*


APPENDIX N: NACOSTI Research License


REPUBLIC OF KENYA


NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 267566 Date of Issue: 10/November/2023


RESEARCH LICENSE




This is to Certify that Ms. Loice Afwande Abwao of Tangaza University College, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Relationship between Demographic Variables and General Anxiety Disorder among Single Mothers in Pentecostal Churches in Kibera Informal Settlement, Nairobi County, Kenya for the period ending : 10/November/2024.

License No: NACOSTI/P/23/31354

267566
Applicant Identification Number


Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



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See overleaf for conditions